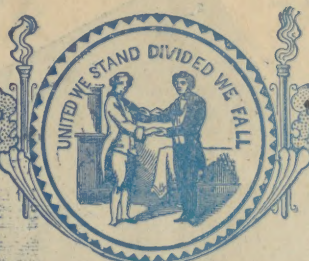


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FEBRUARY, 1907.

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THE KENTUCKY MEDICAL LAW:

It will probably be a surprise to many of our readers to learn that ours is one of the few States in the Union which has been freed from advertising and itinerant charlatans and quack medicine troupes. Before the present law went into effect fifteen years ago, as older members of the profession will remember, Kentucky was a paradise for quackery of every known variety. The cities and city papers were full of them. Alluring advertisements with pictures and flaming headlines announced monthly visits "for one day only" of some European or other wonder-working doctor, especially anxious to try his skill on cases considered obscure or helpless by physicians. Street vendors and clog-dancing troupes, robbing the sick, and vulgarly ridiculing or villifying the profession, and bringing reproach upon it by calling themselves "Doctors," were looked upon as things only to be endured. And conditions just as bad as this are still endured in most other States.

Until still more recently any one could begin the study of medicine, with or without preliminary education, who could raise the cut-rate fees of the schools, the so-called entrance examinations of the colleges being recognized as little more than a farce. As a diploma entitled the holder to a certificate to practice without examination, in spite of the fact that many highly qualified men came in with them, the profession was being rapidly filled with that large undigested and indigestible class of low grade men who cannot be induced to join or attend medical societies, and who are to be an incubus upon the profession, and a still greater danger to the people, as long as they live. All of this is being changed. Any one desiring to enter a medical college here or elsewhere which will be recognized by our Board, must present at

least a high school diploma or pass an equivalent examination before an official State examiner not connected with any medical college, and obtain his certificate. After a four years' course he must then pass an examination before the Board for his certificate to practice. This will not exclude or work a hardship upon any competent young man, but it insures that all who enter a college which will be recognized here shall have had enough preliminary education to enable them to comprehend what is taught them. The Louisville schools are working hand in hand with the Board in the enforcement of the law. In like manner, the problem of osteopathy, once so serious with us, and still so in many States, has been patiently worked out upon lines fair and just to all concerned. Those desiring to practice this method take the same examination required of other schools, they are confined to their own system of practice by the strict letter of the law, and they conform to the same rigid rules in regard to traveling and advertising which govern our own profession.

Kentucky stands almost alone in these accomplishments, because, as the State Board of Health freely admits, in securing and enforcing the legislation, bitter and long drawn-out legislative and legal contests, in which the result often seemed doubtful, and in building up the public sentiment which made it all possible, at every step the Board has had the unvarying, loyal support and confidence of every reputable physician of every school of practice to an extent never obtained in any other State. Honest differences of opinion there have been, of course, with the college men and representatives of other systems of practice, when new plans and policies were proposed, but these always disappeared in the face of frank conferences and under methods fair and helpful to every interest con-

cerned. In this way we have always been able to present a solid front before the legislature and in the courts.

This is good so far as it goes, but much remains to be done. In several counties druggists, opticians and obscure so-called doctors are constantly evading or violating the law, to the detriment of the best interests of the people. This is especially true of the treatment of venereal diseases by druggists and their boy clerks. These things are plainly prohibited by both the spirit and letter of the law, and it is the fault of the county societies if it is allowed to continue. Joint conferences should be held between the prosecuting officials and county societies, or influential committees should be appointed to look after the matter. These offenders are sometimes protected by a political pull, but this is as nothing compared with the united influence of the profession of almost any county, especially when it is made plain it is to be exercised unselfishly. The practice of criminal abortion and the liquor and drug habit in the profession should be openly and frankly discussed in every county society. The Board has recently made an appeal to both the profession and people for assistance in securing evidence against those violating the law in these matters, and this should be willingly given. Except as to abortions, efforts at reformation should always precede complaints against any unfortunate who has fallen into bad habits, or the fact should be reported to the Board with the recommendation that it take up the case in this kindly spirit. Care should be taken that no element of spite or personal prejudice should enter into the work. The patent medicine evil also demands careful educational work, better done by means of public meetings and discussions.

We have barely laid the foundation for a great organization, better in many respects than in any other State, but still very deficient, as we know, in every county, and as a whole. We have a strong law, deficient in matters of detail, but purposely so arranged that these may be easily cured by amendment. It has already given our people more protection from quackery than has been afforded in any other State. Our weakness lies in our county societies. A number of these are doing excellent work, but many of them have little life in them. We appeal to the profession to get together in every county, to induce every eligible man to join the society, and to stand and pull together for the common good. If this can be done and we can have a wise and conservative administration of all of our affairs for a few years, our peo-

ple will be given the protection from ignorance, incompetency and fraud for which the laws were designed, and our profession easily placed in the front rank in all of this good work.

ABOUT THE JOURNAL.

The Journal reaches between 2,500 and 3,000 Kentucky doctors each month. We are getting a number of subscribers outside of the State and our Business Manager promises to get many more before the close of the year.

Every member of the Kentucky State Medical Association is an owner of the Journal, share and share alike. It belongs just as much to you, Doctor, as it does to the President, the Councilors or the editors, who are managing its business affairs, and you are just as responsible for its success. Its present income almost pays for its printing. If every society in the State will help it can do much more than this.

No advertisement will be accepted unless it comes from a reliable house. The standing of every firm is investigated before the application for space is endorsed. No drug has heretofore been accepted *which had been disapproved* by the Council on Pharmacy of the American Medical Association. Hereafter no drug or proprietary medicine will be advertised which has not been approved by the Council. This means that you can specify with confidence any drug you see advertised in these columns. If you want the Journal to be increased to 80 pages in the near future so it will be able to publish full proceedings of every county society in the State each month help our advertisers. *Every cent of income from the Journal will be expended on the Journal.* If our doctors, when they use Syrup of Hydrionic Acid will specify Gardner's, or when they use antitoxin will demand Mulford's or Park-Davis' or Stearn's, or when they have digestive disturbances from lack of enzymes will prescribe Peptenzyme, or when pharmaceutical preparations, pills, tinctures or whatever else, are to be used see that Merrell's, Arthur Peters, or the Abbott Alkaloidal Company's preparations are furnished, our work will be made easy. If you want medical books, Appleton & Co. will send you a catalogue of their standard works and they are the best published. In the same way the Cystogen Company, Schering and Glatz and the Lambert Pharmaceutical Company make reputable products that we can as self-respecting doctors afford to use.

It is unnecessary to say to Kentucky doc-

tors that they should patronize Kentucky schools. Kentucky University, the Hospital College of Medicine, Kentucky School of Medicine and the Louisville Medical College present their claims in this issue. These are the friends of the State Association. Besides this you will be doing any medical student attending college in other States a kindness by calling his attention to the requirements of our State Board. Only six or seven have already provided for Medical Students Examiners for beginners, and students not having entrance certificates from such officials never can practice in Kentucky under our law.

If you are still using ledgers and cumbersome books in your work write the Geo. G. Fetter Co., and get them to tell you how to start a modern card index system, or if you need a typewriter get an Oliver. They make a special sort for doctors.

The sanitariums we advertise can be depended upon absolutely. They are as good as any in the world. Treatment for the whiskey or drug habits are worthless outside of an institution. Many cases can be relieved in them. Many nervous troubles can be treated better in institutions than at home. You can rely upon the statements made by our advertisers. This is particularly true of the two excellent maternity homes. Of course, no reputable doctor will commit a criminal abortion. No sane man would willingly be guilty of the deliberate murder such an operation necessitates. Many unfortunate young women, however, may be reclaimed from lives of sin by being sent to these places. It costs something, but rarely as much as the professional ghouls who do such dirty work charge for nefarious operations, and the responsible man should pay for the protection and reclamation of his victim anyway.

For elastic stockings, trusses and orthopedic apparatus the Pomeroy Company in New York can furnish the best at reasonable prices, and of course Mark's artificial legs and arms have been the standard for years.

These firms are the patrons of the profession of Kentucky. We have the best profession and the best organization in the country. Let's show our friends our value and they will help us to publish a better Journal.

SPECIALTY MEN.

Almost every day some engaging looking man, dressed like a bank president, and as polite as Punch, comes into each doctor's office to demonstrate to him the virtues of diluted wine at high prices as a food in wasting diseases or a new specific for headache

and other aches at so much per ache. Most of these men are fakirs, pure and simple. Some of them represent honest houses, but they all look alike. One of our best county societies has adopted a good plan for ridding their members of the bad class and ask us to recommend its general use by the profession. Ask your next visitor who wants to sell you something if his wares are advertised in your State Journal. If they are they are reliable as nothing else is accepted. Our friends in Campbell-Kenton counties say this plan is a splendid one to get rid of traveling pests.

We can say to the profession that the Council rejects several advertisements for each one it accepts. We would like to hear from other societies which try this plan.

ANNUAL DUES.

The annual per capita dues of each member of the State Association are two dollars. Each county adds a small amount for the county dues. If yours have not been paid, permit us to suggest that you send them to your county secretary to-day. He has enough hard work to do without having to expend as much effort in the collection of your dues as he does his own bills. He gets nothing for his services and it is as much to your interest as his to pay your dues *now*.

Warren County was the first Society to report this year with fifty paid-up members out of fifty-three practicing physicians in the county. Union, Muhlenberg and others followed closely. This was because the doctors of these counties helped Drs. South, Rhea and Taylor to do their work. Not only send in your own dues, but collect from the other doctors in your neighborhood and help your Secretary.

SOME ADVERTISEMENTS.

The Council, feeling that it was but a question of time until whiskey could only be gotten for sick people on doctors' prescriptions, decided to accept an advertisement from some reputable firm whose whiskey could be used in the small class of cases in which alcohol is indicated. Readers of the newspapers know that most whiskey as now bottled is not whiskey at all. If every doctor would insist on those people who actually need it having a reliable, pure whiskey, prescribing it exactly like any other medicine, much would be accomplished not only for temperance, but for common honesty. Above all things, do not belong to that miserables class which prescribe any sort of alcoholics unnecessarily.

MASTOID SURGERY.

By ADOLPH O. PFINGST, M. D., LOUISVILLE,
KENTUCKY.

While it is true that a considerable advance has been made in the surgery of the mastoid bone in the last decade, yet it is a fact that the average physician is not only uncertain as to the indications for the employment of the so-called radical mastoid operation, but that the difference between this and the simple mastoid operation is not fully appreciated. The simple operation, which is employed only in acute cases of mastoid abscess, formerly consisted in finding the pus and evacuating it. However, with our increased knowledge of the anatomy of the middle ear and its communicating cells and a better understanding of the diseased conditions encountered in the bone, our methods of operation have become more thorough. Knowing that more than one focus of pus may exist in the bone and that these cavities may apparently not communicate, there is hardly an operator to-day who in acute cases is satisfied with merely finding a pus cavity and emptying it. Many operators now remove the entire mastoid tip in every case and establish a communication from the antrum to the tympanic cavity. This is still considered a simple Schwartze operation and will bring about a cure with cessation of the otorrhoea in most acute cases.

The radical operation as it is performed to-day, has for its object the direct drainage of the tympanic cavity and antrum through the ear canal. This is accomplished by opening the antrum in the usual way and then removing the superior and part of the posterior walls of the canal down to the tympanic cavity. In this way the antrum, attic and tympanum are made into a common cavity. This common cavity is covered with epithelium, part of which is supplied from the ear canal and concha by plastic surgery and part by Thiersch's grafts. The wound behind the ear is closed at the time of the operation.

This operation or at least the principle of the operation was introduced by Kuster, a general surgeon, as a cure for chronic otorrhoea and to lessen thereby the danger of intracranial infection. The operation is rather an extensive procedure and even in the hands of the most dextrous not without danger of injuring the facial nerve or semi-circular canal. It also endangers to some extent the function of the organ, although if the stapes is kept intact, the hearing is usually not materially interfered with. Unfortunately the results of the operation with reference to the cure of the otorrhoea have not been as satisfactory as could be wished for. According

to the latest statistics of Dench, he reports out of 173 radical operations, six deaths and 34 cases in which the otorrhoea persisted after the operation. Notwithstanding these rather discouraging figures, there are many otologists to-day who advocate the radical operation in all cases of chronic suppuration of the middle ear, believing that the dangers of meningitis, subdural abscess, brain abscess and thrombophlebitis are sufficiently great to justify such steps.

Reference to statistics of Burkner, Randall and others show that death occurs in the proportion of but 1 to 300 of all ear diseases treated and but 1 to 100 of the cases of otorrhoea treated. As their figures were taken from ear clinics they probably represent only about half of the number of cases of otorrhoea as many people with running ears never seek medical aid and many of those who do are seen only by the family physician. As those with complications are nearly all seen by the otologist, the proportion of deaths to the number of cases of otorrhoea would probably be nearer to 1 to 200 if all uncomplicated cases were included.

When we study the anatomy of the temporal bone and see how close the infected middle ear is to the brain membranes, the proportion of intracranial complications is surprisingly small. Notwithstanding all of these figures, we must not underestimate the danger of a discharging ear and we must realize the value of the radical mastoid operation. The question of its application is by no means an easy one to decide. It is a fact that in nearly every case of intracranial infection from an old otorrhoea, symptoms such as recurrent pain usually with cessation of the discharge or dizziness are forerunners of the more serious complications, or there may be an unmanageable formation of granulation tissue, yet an occasional case in which complications developed rapidly is the basis of argument for operation in every case.

Even if the profession were agreed that surgical treatment would be advisable in all of these cases, much opposition on the part of the family would be encountered by suggesting a major operation for the relief of a seemingly trivial affection with the patient apparently in perfect health.

In the opinion of the writer, cases of chronic otorrhoea with frequent or occasional exacerbations of pain, or those cases in which granulations project from the tympanum into the ear canal should be subjected to the radical mastoid operation. It should also be undertaken in cases of cholesteatoma with marked sensitiveness over some portion of the bone if the subject be young enough to jus-

tify it. In simple cases of otorrhoea which fail to respond to therapeutic treatment, but without pain or granulation tissue, the patient or his family should be advised of the possibilities of grave complications if left unoperated and have them assume the responsibility of deciding for or against an operation.

NEPHROLITHIASIS.

By JOHN R. WATHEN, M. D., LOUISVILLE, KY.

The diagnosis and the treatment of calculi in the kidneys and the ureters have received much more attention of late than was formerly given these conditions.

Stones in these organs are more prevalent than is generally supposed. In the diagnosis it has been the custom to instinctively look for the typical symptoms of the old-timed picture of renal colic, coming on in paroxysms, with frequent hematuria and urine loaded with pus and containing perhaps sand and gravel. Of late years we have come to realize that where all these symptoms are constantly present the destructive processes have advanced so far that in all probability the kidney has ceased functioning and has become a lost organ, where only a nephrectomy is indicated to remove so much useless pathology.

If we wait for this infallible picture of the symptoms to occur before we make our diagnosis we have delayed too long to offer much in the way of curative results. It is very much like we formerly delayed in gall-stone cases to see the typical jaundice appear before realizing the necessity of early surgical intervention. This delay in the past was partly excusable for the reason that the early symptoms of stone simulated so many other diseases with which it could be confused and because our diagnostic methods had not as then reached the perfection of to-day, when the condition can be determined with considerable ease and accuracy. The statistics as to the comparative frequency of the stones vary widely. They are found in about 1 per cent. of post-mortems, while gall-stones are found in 10 per cent., and it is generally agreed that they are most frequent before twenty and after forty years of age, and more common in males than females.

While it is undoubtedly a fact that kidney-stones, like gall-stones, may lie dormant and remain innocuous, giving rise to few or no symptoms which would lead to a diagnosis, it is the writer's firm conviction that as we devote more attention to the study of these conditions we will be able to better and earlier recognize their presence, just as we are do-

ing to-day in the biliary and the pancreatic regions.

It is not our purpose to dwell upon the differential diagnosis of urinary calculi, as such would necessitate a very long discussion of the almost innumerable pathologic conditions with which it might be confused; but rather to discuss the diagnosis and the treatment of suspected kidney and ureteral stones from the standpoint of our personal views gained from the clinical work of others and our own experience.

While we all acknowledge that those advanced cases where very large calculi are present or much destruction of tissue has taken place from even a small infected stone are comparatively easy to diagnose, we likewise realize that an early diagnosis is sometimes most difficult.

Urinary sediments should, of course, be very thoroughly examined microscopically for pus, blood, bacteria, crystals, etc., but the writer is placing less faith in its finding than most clinicians.

The only symptoms on which much reliance can be placed seems to be pain, varying from very mild to very severe as often only a slight uneasiness in the kidney region. The direction of radiation of this pain is often pathognomic of this condition.

Ramon Guiteras has recently written:—"The fact is, the symptoms are not always in proportion to the extent of the disease, and I have often been surprised to find how few symptoms a patient will have when his kidneys have been nearly destroyed by the morbid process. Another clinical group of cases is one in which the existence of stone is not suspected, because the train of symptoms does not point to any affection of the kidneys, but rather to the trouble in the bladder, the uterus, the ovaries or the testicles. In such cases the symptoms are reflex in their origin, as will be seen from what follows.

In the majority of cases there is pain in the lumbar region corresponding to the affected side, or in that side of the abdomen, although there may be a general abdominal pain. This pain often runs down into the groin, or the testes of the affected side. It is of varying degrees of intensity, from a dull ache to the excruciating, sharp, cutting pain of renal colic. It may be continuous, but generally follows exercise or jolting, although cases have been reported when it occurred at night. It is renal colic, however, which usually causes the patient to consult a physician in cases of stone in the kidney, especially if it be associated with or followed by hematuria."

Leopold Casper has also recently written

concerning the diagnosis: — "The pain in nephrolithiasis may be either constant or periodical. When constant it occurs as a feeling of pressure in the region of the kidney which annoys the patient but little or not at all, although it is prone to become worse upon motion, and particularly upon certain kinds of movement, such as bending or stooping, for instance. Pressure upon the kidney or upon the lumbar region below the last rib also increases it."

After considering the symptoms we next turn to the direct examination of the bladder with the cystoscope and catheterization of the ureters. This method is of little value to the average clinician, as this is often very uncertain and misleading even in the hands of the most experienced.

The writer condemns the method after a fair experience in this field, having catheterized, as I believe, the first ureter in Louisville at the City Hospital as early as 1899, and having reported in a paper to the American Urological Association in 1903, 126 cases examined for bladder diagnosis with the cystoscope, including some photos of pathological findings, one of which was later quoted and illustrated by Dr. Max Nitze, of Berlin, in Von Bergman's System of Surgery.

As to Dr. Kelley's wax-tipped ureteral catheters in the diagnosis of kidney stones, I can do no better than to quote what a few others have said of such methods.

Henry Morris says that "this inspection is rarely needful or helpful and, as a rule, is an unnecessary procedure." Ransohoff also in discussing this method has recently said:—"In kidney surgery where stone is suspected, ureteral catheterization has no place. I think it is the very last thing one ought to resort to in making a diagnosis of stone in the kidney. Any one who knows much about the position of stone in the kidney will recognize the fact that he must be exceedingly fortunate if a wax-tipped bougie should happen to strike the stone in the kidney. In the ureter it is a different thing. With the wax-tipped bougie, where a stone is located in the lower pole of the kidney, how on earth can it come in contact with that stone?" But in spite of these adverse criticisms it must be acknowledged that in the hands of such an eminently skilled surgeon as Kelley, most beautiful results have been accomplished, which would have been failures in the hands of the average surgeon. It was only recently that the writer had the pleasure of seeing Kelley accomplish this procedure in a most dextrous manner on several interesting cases.

In the opinion of the writer the only really

valuable and practical method for the diagnosis of kidney and ureteral stones is the X-Ray, and its failures in the past were due more to our inexperience in its use for this special condition than to any faults in the X-Ray itself. A well-made gun in the hands of a novice is not capable of doing accurate shooting.

This method has not been as popular in this country as in Germany, and from their most excellent photos and reports of a very large clinical experience we would judge that our technique must have been at fault. Too much credit cannot be given such men as Albers-Schonberg, Kummel, Rumpel, and others in Germany and Leonard, Bevan, Beck, of America, for the fundamental principles they have elaborated, and if their work was better known we could expect improved results.

The German compression cylinder, water-cooled tubes, which maintain their vacuum, and Wehnelt interrupters have made possible much more rapid and clearer pictures.

It is now possible, as Albers-Schonberg has said, to diagnose the very smallest and least opaque uric acid calculi where we have a correct technique showing the transverse processes of the vertebrae, the outlines of the psoas and quadratus lumborum muscles and the last two ribs, with structure. In discussing this method of diagnosis Carl Beck has said: "It is one of the strange phenomena in medicine that, in the face of the most abundant proofs of the reliability of renal skiagraphy, some of the best text-books still hesitate to recommend the method! some others even openly warn the practitioner against it. This they do because they have observed or heard of grave errors committed in its employment. Thus it is said, for instance, that the skiagraphs taken by the 'best experts' have shown renal calculi, while nephrotomy disclosed the absence of any concretion, and, on the other hand, that cases were reported in which calculi were found at the operation after skiagraphy had failed to show their presence. None of these reports are well founded. A definite diagnosis is suspected lithiasis can be made in each and every instance; in other words, a renal calculus must invariably show provided a calculus is there." Irvin Abell has recently said:—"It is true from my individual experience that there are very few cases in which we can make a positive diagnosis of the presence of a renal calculus without the help of the X-Ray, showing the stone in the kidney or ureter. There are some symptoms, however, or combination of symptoms, haematuria with colic, the passage of pieces of calculi, a cystoscopic

examination showing pus coming from one side or both, a tender kidney, from which we can make a diagnosis sufficiently correct to make us feel confident of finding a stone upon opening the kidney. But the X-Ray shows not only the presence of the stone, but its exact location. In one of my cases, the X-Ray was of great assistance, not only to the patient, but to myself as well. In the first place it showed the exact location of the stone in the ureter and not in the kidney, and saved an incision in the kidney. In the second place it showed the exact location of the stone in the ureter and enabled me to take up the ureter at that point and remove the stone. The opening in the ureter was closed with Lembert sutures. There was no leakage. The X-Ray plate demonstrating the position of the stone was a great advantage to the patient and to me. The only condition associated with renal calculus in which we would be justified in using the ureter-catheter would be where we wished to determine the capacity of the other kidney where the removal of one kidney was contemplated. Where there was disease or constriction in the other ureter it would give valuable knowledge to the full conduct of the case. Personally I would place the X-Ray in diagnostic importance above everything else we have, if in the hands of competent men."

The treatment of kidney and ureteral stones is always surgical, and as soon as possible after the diagnosis is made the removal should be undertaken. Before suppuration and the resultant destruction of the renal parenchyma has taken place the mortality for nephrolithotomy is about 3 per cent., while later it reaches over 10 per cent. The operation is usually safe, easy, and, in uncomplicated cases, a most satisfactory one.

The kidney is best reached by an oblique lumbar incision just below the last rib, splitting the muscles in the direction of their fibres, dissecting off the perirenal fat, and with one hand pressing upon the anterior belly wall, lifting the kidney well out of the incision. This allows a very free inspection and palpation of the kidney and the upper part of the ureter.

The kidney should be incised longitudinally through the lateral portions of the posterior pyramids, parallel with Broedel's white line, and also with the posterior surface of the kidney, thus dividing the kidney so that three-fifths will be anterior to the incision and two-fifths posterior to it.

This incision divides the thinnest portion of the parenchyma, avoids the larger blood-

vessels, and affords the best access for removal of calculi.

Recently the writer had the pleasure of seeing Halstead employ a nice method of controlling the hemorrhage by constricting the kidney pedicle with a roll of gauze wrapped around and clamped with forceps. This makes an almost bloodless operation and avoids injury to the delicate structures.

After the removal of all stones and a careful inspection of the kidney, a sound or ureteral catheter should be passed down the ureter into the bladder to see if there are any calculi lodged in this channel. If any are thus located, the original incision can be enlarged and the ureter traced down to the bladder.

The kidney is best closed with mattress sutures and with fine Lembert stitches placed in the capsule. Drainage and closure of the muscles and skin easily complete the operation.

PNEUMONIA

BY CARL WEIDNER, M. D., LOUISVILLE.

(Concluded from January Issue.)

Physical examination of the chest by the classical methods show lessened movement and expansion over the affected side; vocal fremitus (palpation) is usually increased. Auscultation and percussion furnish the most valuable data. In the early stage percussion gives slight dullness or more frequently a tympanic note (dull tympany) because the lung tissue has lost its normal tension and elasticity.

When the exudate has filled the air cells (hepatization) we get dullness on percussion. Exceptionally, however, we may have tympany in apex pneumonia, either because the hepatization is not complete or because the tracheal tympany is transmitted through the solidified lung. (It is always well to direct the percussion blow away from and not toward the trachea.) The stomach tympany also may be transmitted through the solidified left lower lobe. Skoda's resonance is usually found over the upper healthy lobe in infiltration of the lower lobe. As the lung gradually clears up dullness gives way to resonance. *Auscultation* gives first puerile breathing, then *crepitant rale* of the first stage, then *bronchial breathing* and *bronchial voice* (bronchophony) during the stage of hepatization, and as the lung gradually clears up broncho-vesicular to normal respiration accompanied by moist rales.

In the case that the bronchial tubes also be-

come blocked as in the "massive" pneumonia all breath-sounds are absent. In pneumonia of the apex a difficulty may arise of differential diagnosis from a tubercular infiltration of that lobe. I recall an instance of this sort at the City Hospital. The highly febrile patient showed dullness and loud bronchial breathing over the left upper lobe, and the interne had made the diagnosis of pneumonia, while in reality it was tuberculosis. The history of the case, the fever-curve, examination of sputum, blood examination and the future course will usually clear the diagnosis in such cases.

The lobes of the lung are affected as to frequency in the following order: Right lower lobe, 52 per cent; left lower lobe, 30 per cent.; both lower lobes, 12 per cent to 15 per cent; upper lobes, 12 per cent. to 15 per cent.

One of the sources of great anxiety to us all has been a much delayed crisis, or a termination by lysis or a postcritical fever. There are many dangers lurking in the dark. The fever may be caused by an extension of the process to previously healthy lung, or to the many complicating or accompanying troubles as abscess formation (rare in croupous pneumonia), peri and endocarditis, meningitis, arthritis, otitis, but especially by pleurisy with exudation, either sero-fibrinous or purulent, or, in rare instances, tuberculosis. *Whenever after sufficient time the dullness does not disappear look out for pleural exudation!* The flatness of percussion, absent respiratory movement, absent vocal fremitus, absent respiratory sounds, absent vocal sounds, the displacement of neighboring organs, as the heart, liver, spleen, the obtunding of Traube's semilunar space (if on left side) are usually sufficient to diagnose a pleural exudate. If still in doubt, make a careful test-puncture, to determine both the presence and character of the exudate. Baccelli's sign gives us a pretty reliable differentiation between sero-fibrinous and purulent pleurisy.

The mortality of croupous pneumonia is rather high in this country, especially in hospital cases, ranging from 10 to 25 to 50 per cent. (Massachusetts General Hospital, Johns-Hopkins Hospital, Philadelphia General Hospital.) It is much more favorable in young people and healthy adults; it is bad in the aged. German army statistics show in over 40,000 cases a deathrate of only 3.6 per cent. Compared with older statistics we have no reason to be proud of our later ones. Louisville, Ky., in 1906 out of 3,949 deaths from all causes had a deathrate of 347 cases of pneumonia, not including 36 cases of broncho-pneumonia and 14 by "congestion of the

lungs," while 501 people died of tuberculosis.

Death occurs rarely in the first two days except in typical pneumonia and drunkards. The extent of the pulmonic involvement, the violence of the infecting germ and the individual resistance of the patient mainly determine the outcome. General toxemia may cause death by causing extreme nervous depression, and the cardiac debility which is the result of the toxemia as well as the obstruction to the pulmonary circulation may contribute to the cause of death, edema of the lungs frequently terminating; sudden jumping up in bed may cause sudden death by paralysis of the intoxicated debilitated heart. Complicating troubles mentioned often are the cause of death.

Prophylaxis and Treatment of croupous pneumonia. Preventive measures are indicated by our knowledge of the etiology, and include regulation of the mode of life, general and special hygiene, etc., provided we have influence over our patients. Sputum of pneumonia patients ought to be destroyed. In treating this as well as any disease, we must bear in mind the following "golden rules":

1. There is no routine plan of treatment, you must consider the individual patient.
2. Recognize the indications, and ask (a) What is desired to be done? (b) what can you do? and (c) how can you do it?
3. If you do not know what to do—do nothing!—nil nocere!

A specific treatment seems still a dream. The bacteria have done their work when we see the patient. Their toxins do the harm. We must direct our treatment to toxemia. Antitoxic serum from immunized animals has been introduced by Klemperer, but has not found general favor and the mortality of 13.5 per cent out of 265 cases collected by Nothnagel-Musser is not very encouraging, compared with other methods. We must assist nature's resources by an intelligent hygiene, by supporting it by proper food, protection against reinfection, aiding in the elimination of the toxins, and by preventing waste of energy. In addition certain symptoms must be treated, we must add to the comfort of the patient and support him and protect him in the critical period.

The room must be well ventilated, light, of an even moderate temperature (60° to 70° F.) The clothing and bedding must be warm but not too weighty. If possible an intelligent nurse must be engaged. Complete rest in bed is one of the cardinal requirements, do not disturb him too much, use the bed-pan, and do not examine too often after you have

made the diagnosis. The *diet* must be light but nutritious, concentrated, albumin water acidulated with lemon juice, chicken or veal broths, raw eggs, buttermilk, peptone solution of any good manufacturer, and fruit juices. The hygiene of the mouth, nose and throat is very important and must be seen to several times a day.

Vaporization of the room by means of an alcohol lamp or gas, not a coal oil stove, of carbolic acid, turpentine, eucalyptol, creosote, compound tincture of benzoin is desirable for several reasons. I order them for 15 minutes three to four times in twenty-four hours, especially when resolution begins..

Pain is best combated by application of cold. I prefer the rubber ice bag during the first 24 to 48 hours, rest, and, if needed, small doses of morphia or heroin. Aspirin in 5 gr. to 10 gr. doses often serves well.

Headache is often severe, it is chiefly toxic and is best relieved by the ice-cap, and *elimination* by a good dose of calomel, salines and enemas of a pint of normal salt solution, repeated every six to eight hours. The other brain symptoms are combated by the same means.

Fever, in our present uncertain knowledge as to its possible immunizing effect, needs no special treatment; above all *avoid drug-antipyretics!* they depress the nervous energy and the organ that needs most protection—the *heart*. If the heart needs assistance in the form of stimulation, use camphor, caffeine or digitalis; I have almost discarded the use of alcohol in late years; if the peripheral vascular tension burdens the central pump, relieve it by nitrites or nitroglycerin. No doubt there are some cases where an over-distended right heart indicates bleeding. Quinine as well as digitalis are believed by some to have a specific effect, but I can find no authentic proof for that hypothesis. As an antiseptic, an agent that may *modify* the favorable conditions for the bacterial development, *creosote carbonate* has been recommended some years ago. I have had occasion to use it repeatedly and with all my therapeutic skepticism, my observations have been such that I would like to have it given a thorough trial. I agree with Andrew H. Smith that it should be given in *large doses*, one drachm every three hours in hot milk, *early in the disease* before the exudate is poured out into the air cells and before the blood vessels in the lung are blocked. It is also a good intestinal antiseptic and prevents the formation of gas.

Benzosol may be substituted for the creosote carbonate and given in doses of 5 to 10 grains every three hours in adults. Alcohol

externally is a fine cleansing agent. Water *internally* is a fine cleansing agent.

Delirious patients with hallucinations must be watched constantly, as there are a number of instances where they have thrown themselves out of the window.

In delayed resolution, the proper use of hydrotherapy, iodine preparations, K-I or the pure tincture of the syrup ferri iodide and tonics are indicated, also the named inhalations by steam and amonia.

The complications must be looked out for and treated as they arise

PHYSICIANS AND PROPRIETARY DISINFECTANTS.

In preventive measures, as in curative methods, physicians, as a class, are frequently made the dupes of Proprietary Medicine.

In practical therapeutics they are induced to use proprietary forms of remedies by the simple statement of the traveling advertiser that same are far more efficient than standard remedies—no matter how carefully the latter may be prescribed. All that the vendor of a proprietary article needs is a name, easily remembered, that will indicate the use of his remedy, and—shame be it said—many physicians will hasten to prescribe it.

And even if the desired effect is *accidentally* obtained through the use of some such agent, by what method can a physician determine how his patient was relieved? The old way of working by studying the condition of a patient, and knowing the physiological action of the drug to be given, and then giving the drug for specific effect, is the only way our therapy can possibly be improved upon, or even kept at its present standard.

In Preventive Medicine also the proprietary and patented evils are met with.

Shrewd business men, with a greater or less knowledge of medicine (ordinarily it is less) recognizes that formaldehyde is accepted by the medical profession as the best disinfectant, so they quickly prepare it for sale in some form other than the recognized forty (40) per cent. aqueous solution. They reduce the solution to a solid, and then advance the claim that one ounce of their solidified product is more powerful by far than one pound of the forty (40) per cent. aqueous solution, which, by actual weight, is equal to two-fifths of a pound of solid formaldehyde.

Ask the salesman of the patented article why one pound of the forty per cent. solution, when heated and evaporated, does not give off as much formaldehyde, and formal-

dehyde just as penetrating, as may be obtained from one ounce of his patented solid product, and he replies "that is my secret." In reality, that is his "game," and physicians and health officers pay for the playing—with a chance of paying at the expense of those who depend on their advice.

For, considering this: If *one pound* of forty per cent. aqueous solution of formaldehyde,—which represents two-fifths of a pound of solid formaldehyde—is necessary to disinfect a room of 1000 cubic feet in measure, is not one liable to be placed in a position of false security by relying for the same work on only *one ounce* of Dr. So-and-so's specially solidified brand? And then, what reason is there for risking the chance of such a false step? There is not even such a culpable reason to be advanced as a resulting small pecuniary saving. For one ounce of the patented variety of formaldehyde costs more than one pound of the forty per cent. standard article.

In disinfecting, as in applied therapeutics, the object to be attacked should be studied. And in selecting such agent, physicians should uniformly and strictly adhere to the use of known articles of proved strength.

J. C. MOSELEY.

COUNTY SOCIETY REPORTS.

McCracken—One of the most interesting sessions held for some months by the McCracken County Medical Society, was that last evening with Dr. J. T. Reddick at his office in the Columbia building on Broadway. An unusually large number of physicians were present and during the session the society elected officers to serve for 1907, as follows: President, Dr. B. B. Griffith; Vice President, Dr. F. W. Kimbrough; Secretary, Dr. L. L. Smith; Treasurer, Dr. Delia Caldwell; Censor, Dr. Horace T. Rivers.

Dr. Frank Boyd was chosen the Paducah delegate to the State Medical Society which meets next October at Louisville.

During last night's gathering Dr. Reddick served his guests with a delicious spread consisting of many dainties. Before adjournment the physicians adopted the following resolutions of respect in memory of the late Dr. J. Robert Coleman, during life one of the eminent members of this professional organization:

"The death of a representative man marks an era in the history of the science in which he acted a conspicuous part; and it becomes those who have been associated with him to commemorate his death by passing in review the important events of his life, and by bringing into relief the distinguished acts by which he identified himself with the profession which he adorned.

"Dr. John Robert Coleman was born August 22nd, 1860. He graduated in medicine from the Medical Department of the University of Louisville in the class of 1882-3. He located at Murray, Kentucky, and practiced from March 1st, 1883, to July 31st, 1900, when he moved to Paducah, Ky. His reputation as a citizen and physician preceded him when he came to Paducah, and he at once took front rank as one of the leading citizens and physicians of this city.

"Early in his professional life, Dr. Coleman recognized the importance of medical organization and his energies have been directed to that end. He became a member of the Southwestern Kentucky Medical Association in May 1883 and was elected corresponding secretary in May, 1886. First vice-president under the venerable Dr. Reuben Saunders in 1890 and President in 1891. He was ex-vice president of the West Tennessee Medical and Surgical Society and ex-president of the various medical societies of Calloway county. He was president of the McCracken County Medical Society in 1904 and vice-president of the Kentucky State Medical Society in 1905-6.

"The profession to which he seemed fitted by natural gifts and acquirements, also came to him by inheritance, as his father was for many years one of the leading physicians in Western Kentucky, preceding the son by only a few months to the great beyond.

To the noble and beneficent profession of medicine Dr. Coleman had devoted more than a score of years and he was yet in the prime of professional manhood when the symptoms of a fatal disease appeared, which gradually sapped his physical constitution. Notwithstanding, he was fully cognizant of his condition, and knew well the inevitable result of his malady, and no doubt many times was weary and in pain, yet he went about doing good, apparently happy and contented, and died that others might live. The poet's and historian's pages are filled with the names and deeds of those who, to achieve power and fame regarded not the tears nor spared the blood of their suffering brothers. We still hear the words of command and the shouts of triumph that were uttered in the world's infancy; the warrior's martial tread and the steel that clashed in the far-off centuries are made to resound throughout the ages, but deeds of those who were angels of mercy to a suffering world remain unrecorded and unsung. They who do good neither ask nor need reward; the act brings its own recompense.

"The quality of mercy is not strained;
It droppeth as the gentle rain from heaven
Upon the place beneath. It is twice bless'd,
It blesses him that gives, and him that takes."

"But when the summons was felt to be inevitable, he calmly confronted the issue, and sur-

rendered in entire resignation to the inexorable fiat; and so he passed away amid the tears of his family and the sincere regret of the community in whose midst his labors gave promise of a benefaction.

"Dr. Coleman was a man of fine personal appearance, of a bright and happy disposition and always in demand at our social gatherings. He enjoyed good anecdotes, and was particularly happy in telling them, and by them often, he was apt "to point a moral or adorn a tale." In our medical society his smiling face always beamed a welcome, and a benediction. How sadly we will miss him. And as we gather this evening, as the McCracken County Medical Society, we tender to his grief stricken family our sincere condolence in this, the darkest hour of their bereavement.

J. G. BROOKS,

J. T. REDDICK,

H. S. REYNOLDS,

Committee.

Dr. Coleman died Dec. 10th, 1906, and his remains were carried to his old home, Murray, Ky., for burial Dec. 11, 1906. He was married to Miss Jessie McElrath, of Murray, Ky., who, with two grown daughters survive him.

Dr. Coleman was unusually bright and witty and would have been a shining light in any sphere of life.

He was an enthusiastic Free Mason, rarely ever missing the sessions of the Grand Lodge and at the time of his death was Grand Marshal of the Grand Lodge of Kentucky, and was buried with Grand Lodge honors. Past Grand Master, James E. Wilhelm, of Paducah, officiating as proxy of the Grand Master and delivering the funeral oration at the grave. Dr. Coleman was an honored member of Paducah Commandery, No. 11, Knights Templar, and an escort of uniformed Knights accompanied the remains to their final resting place.

W. J. Hills, Supt. N. C. & St. L. R. R., who was a close friend of Dr. Coleman generously donated a special train to the family and friends of Dr. Coleman, thereby affording the members of our County Society an opportunity to attend the obsequies. Quite a number of the members availed themselves of the opportunity.

J. T. REDDICK, Secretary.

Allen—The Allen County Medical Society met in their annual meeting on Friday, December 21st, and elected officers for the ensuing year, Hubert Meredith was elected President, A. L. Wagoner, Secretary. After the election of officers Hubert Meredith read a paper entitled, "The Importance of the Functions of the Iris and its early recognition By the General Practitioner When Diseased." It was fully and profitably discussed as well as many other important questions of medicine and surgery. After

the business of the meeting the Society, together with several invited guests repaired to the Goad Hotel where covers had been laid for twenty and the hours from one to three o'clock were used in replenishing the inner man. Those present were Drs. Whitney, Dixon, Ray, Bunch, Wiloughby, Honaker, House, Pace, Wagoner, W. E. and H. M. Meredith. Dr. Ernest Rau was expected, but the bad weather prevented him from being present. The invited guests who attended were Rev. L. M. Russell, Rev. B. S. Harper, Tibbis Carpenter, L. D. Williams, T. B. Dixon, W. C. Jackson and A. G. Pearson. Dr. W. E. Meredith was toastmaster and several eloquent speeches were made in response to toasts Hon. Thurman Dixon responded in the following address to the toast, "The Doctor as a Hero."

In accepting the honor of your kind invitation to be present on this occasion, I am not insensible of your kind preference in according me the opportunity of this hour; neither am I able to tell you how much I appreciate the pleasure and advantage I feel in being here. It would certainly be a pleasure to any one to be associated with, and surrounded by this company of heroes, besides the advantages are great and many that I have, especially over my hungry and uninvited friend on the outside. Not only that, although unused to facing such blessed opportunities and having an appetite unfamiliar with such splendid culinary productions, yet I feel perfectly safe to indulge that appetite to its full satisfaction, knowing that:

I am surrounded on every hand,

By the noblest heroes of our land,

That if I have cramps or any ills,

You will rescue me with a box of pills.

Sir, this subject is one to which hours instead of moments could be justly given in discussion and elaboration. Although the doctor and the name hero have never been conjoined to any attractive notice, yet I declare that no braver hearts or more daring hands were ever adorned with a Carnegie hero medal than are the doctors of this and all ages. You are heroes and have always been such, from the earliest dawn of your profession unto this good hour; from that day in 1809, when Doctor Ephraim McDowell in the backwoods of our own Kentucky for the first time in the history of surgery opened the abdomen and removed a large tumor while a mob clamored at the door declaring that if the patient died his life should pay the penalty, but the patient did not die and that one deed of heroism has added countless scores of years to human life, and subtracted much from the sum of sorrow of the human family.

It was said when the grim spectre of cholera knocked at the gateway of the United States a few years ago, it was estimated that aside from the dreadful devastation and pestilence of the

disease the injury to the commerce of the port of New York City alone would have amounted to millions of dollars.

Who was it, in that hour of need—in that strenuous emergency—that battled with the unseen foe? Was it our brave volunteers? Was it the flower of Southern chivalry, or the exponent of Northern intrepidity? Was it our gallant array of armored battle ships or was it the battalions on land that manned the guns? No; it was the silent man of science, the heroic doctor who stood bravely at the quarantine station on Ellis Island and without sword or trumpeter protected seventy millions of souls. That man is a hero who dares to administer to the needs of that unfortunate stricken with some deadly contagious malady, quarantined from the world and forsaken by friends through fear. It is a hero worthy of the brightest laurels with which a brow can be crowned that through untiring and faithful efforts rescues the perishing soul of man from the torturing ravages of a deadly fever and it was our own Luke P. Blackburn who, when the yellow fever epidemic was in the South, shouldered his saddle pockets instead of his musket and went to their rescue. It was his deeds of heroism in this crisis that delivered him from the loins of your noble profession into the highest office in the gift of the people of the State, and hundreds of other specific instances of the doctor's heroism I could mention, but time limitations forbid.

But I must say, that we, the laity, see a great deal in you to admire that it takes no mirrors to make the display, for in looking upon your heroic efforts, professionally, we see the reflections of the noblest specimens of humanity. Heroes indeed, the home guard of mankind, always ready to meet every duty at whatever sacrifice or discomfort it requires.

I am sure that in your field of labor some of the most brilliant victories have been, and will yet be won. And it is a curious circumstance that the military heroes who gain their victories amid the carnage and horrors of war, have ever been accorded a higher homage than you warriors who battle with the silent enemies of men instead of nations. Of you it has been truly and beautifully said:

“As life's unending columns pour,
Two marshaled hosts are seen,
Two armies on the trampled shores,
And death flows black between.”

One marches to the drum-beat roll,
The wide mouthed clarion's bray,
And bears upon a crimson scroll,
‘Our glory is to slay.’

The other moves in silence by the stream,

With sad, yet watchful eyes,
Calm as the patient planet's gleam
That walks the clouded skies.

Along its front no sabres shine,
No blood-red pennons wave,
Its banner bears the single line,
‘Our duty is to save.’”

Seventh District—I am just back from attending the county societies of Lincoln, Rockcastle and Garrard. The Lincoln County Society met on the 18th at Stanford. Every doctor in town, except one was present at the meeting, and several from the county. We had an enthusiastic meeting; elected officers; made many promises for the year 1907 and had a good time in general. Dr. Steel (not Steal), Bailey will report the results of the meeting. I believe every doctor present paid his dues for 1907. On the 19th, accompanied by Dr. E. J. Brown, of Stanford, I visited the Rockcastle County Society. This society had not met for a few months. This meeting was held at Brodhead and about nine of Rockcastle's doctors attended the meeting. This was one among the best and most enthusiastic meetings I have attended in this district, and if the doctors of this county will follow up the promises and resolutions made at this meeting, great good will result from same. There are lots of good doctors in Rockcastle. On the 20th, accompanied by Drs. Bailey, Brown and Carpenter, of Stanford, I attended the Garrard County Society at Lancaster. Every doctor in the town attended this meeting and some from the county outside. Dr. B. C. Rose, who has recently graduated and moved to the county paid his fee and was admitted to membership. Dr. Kinnaird will report this meeting. The weather was very inclement and I am very much jaded, but feel very much encouraged with the results of these meetings.

J. T. WESLEY,

Councilor of Seventh District.

Allen — Scottsville, November 1, 1906.—Recognizing the fact, that the Kentucky State Medical Society, composed of the best physicians of the State a part of which we are, and willing to abide by anything just and right; therefore, we heartily agree to its action taken at the Owensboro session relative to medical examinations and reduction of fees as proposed by certain old line Life Insurance Companies. Therefore we, the undersigned physicians of Allen County, Kentucky, obligate and bind ourselves, that after January 1st, 1907, we will make no examinations for any Life Insurance Company whose fees are less than (\$5.00) five dollars for each and every examination and in no wise is any part to be paid by any agent representing company. John B. House, Hubert M. Meredith,

A. L. Wagoner, William E. Meredith, W. E. Wiloughby, A. J. Dixon, C. M. Whitney, W. B. Ray, C. J. Stovall, J. E. Pace, R. W. Cook, C. W. Holland, S. B. Bunch, Jno. F. Alexander.

P. S.—Drs. S. S. Pruitt and H. C. Smith have signed similar agreements in other counties.

Trimble—The Trimble County Society met today and elected the following officers for the ensuing year: F. W. Hancock, President; H. P. Fix, Vice-President; S. K. Fisher, Secretary. Every doctor in the county was present and adopted the five-dollar fee for life insurance examinations.

S. K. FISHER, Secretary.

Garrard—The Garrard County Medical Society met in Dr. Kinnaird's office in this city December 20, 1906. Dr. J. T. Wesley, Councillor, accompanied by Drs. Steele Bailey, J. G. Carpenter and E. Brown, of Stanford, were present. Interesting talks were given by the visiting physicians, which were enjoyed by all. Election of officers resulted in W. L. Carman, Paint Lick, President; J. A. Amon, Lancaster, Vice-President and Secretary. The local profession gave a "goose supper" at Zimmer's. We are going to do better work next year.

J. B. KINNAIRD, Secretary.

Letcher—I am pleased to say that we have succeeded in organizing a County Medical Society in Letcher County, of which I was elected President, and the proceedings of same will be duly reported by the Secretary of the Society. I received the copies of constitution and by-laws for county societies and was pleased to get same, the same being adopted as constitution and by-laws for our county society.

I shall do all in my power to make our organization a success.

T. A. COOK, President.

Rockcastle—The Rockcastle County Medical Society met at Brodhead, Ky., Dec. 19, 1906. The meeting was called to order by the President, Percy Benton. After roll call by the Secretary, the business of the society was taken up. S. W. Adkins was made a member. J. T. Wesley, of Middleburg, and E. J. Brown, of Stanford, were made honorary members of the Society. The meeting then adjourned for supper, where each and all of us proved himself a son of Epicurus as well as of Aesculapius, though much more obedient to the first-mentioned god than the last.

After supper the house was called to order for finishing the business of the meeting. Dr. Wesley read a paper on the organization of county societies and benefits of same—a fine and very instructive lecture. E. J. Brown, being called upon, gave the young physicians a

talk on the trials and expectations of the young M. D.'s life, every word of which was very appropriate to the older as well as the younger doctors. Pneumonia and the best way of placental delivery were then discussed by all present which elicited a very lively discussion as to making the physician the Good Samaritan, which in one sense is true. Next a discussion on the causes and treatment of diphtheria by all present which elicited a very lively discussion as to whether it is infectious or contagious, or both, in which every one contended for his own views. Then the insurance fee of \$5.00 was adopted. A fee of 50 cents was charged each member for incidental expenses besides the regular fee.

The following officers for the year 1907 were elected: Percy Benton, President, Brodhead; W. J. Childress, Vice-President, Livingston; S. C. Davis, Secretary, Mt. Vernon; A. G. Lovell, Delegate, Mt. Vernon; Censors: W. E. Graveley, S. W. Adkins, W. D. Laswell. The meeting then adjourned to meet at Mt. Vernon January 24, 1907. Respectfully submitted,

S. C. DAVIS, Secretary.

Daviess—The Daviess County Medical Society met in regular quarterly session on December 18th, with the President, Dr. C. H. Todd, in the chair, and thirty-five members present. Robert Lockhart, of Owensboro, and C. L. Medley, of Rome, were admitted to membership. Officers elected for the following year were: President, A. McKenny, Whitesville; Vice-President, R. E. Griffin, Owensboro; Secretary-Treasurer, J. J. Rodman; Censor for three years, Dr. W. L. Tyler, Curdsville; Delegates, S. J. Harris, W. F. Stirman and H. K. Orsburn. Committee on Legislation was appointed as follows: M. A. McDonald, Whitesville, Chairman; J. A. Woolfork, Thurston; A. L. Coke, Sutherland. As this was a business meeting we had no papers. As is our custom we took dinner together at the Rudd House.

We meet next at the City Hall, Owensboro, on Tuesday, March 19, 1907, at which meeting S. J. Harris will read a paper on cerebro-spinal meningitis. H. K. Orsburn will read one on apoplexy. A. L. Coke will read a paper on chronic malaria.

C. H. Todd read a very interesting letter, written in 1810, which I inclose.

J. J. RODMAN, Secretary.

Fulton—At a meeting of the Fulton County Medical Society on December 15th, J. M. Alexander was elected President, E. L. Baltzer, Vice-President and S. Cohn Secretary-Treasurer. The Society feels that much good can be accomplished by its regular meetings during the year.

S. COHN, Secretary.

Muldraugh's Hill—Muldraugh's Hill Society convened at the City Hall in Elizabethtown, Dec. 13th and was called to order by Vice-President B. M. Taylor, of Greensburg, at 10 o'clock. Minutes of the August meeting were read by the Secretary. Some interesting cases were reported by A. D. Wilmoth, S. H. Ridgeway and D. C. Bowen, which resulted in lengthy discussions. The first paper was read by G. G. Thornton, of Lebanon, entitled "Some Thoughts on Pneumonia and Its Treatment," after which the Society adjourned for dinner. The Society re-convened at 1 o'clock, and was called to order by the President, D. W. Gaddie, of Hodgenville. Dr. Thornton's paper was discussed by S. W. Bates, F. P. Strickler, D. C. Bowen, J. T. Green, J. W. O'Connor, C. T. Riggs, R. C. McChord, S. T. Hubbs and by Dr. Thornton in closing. Dr. W. W. Taylor, Dentist, of Greensburg, read a paper on "The Relation of the Teeth to Health." This paper was discussed by D. C. Bowen, J. W. O'Connor, J. T. Green, W. A. Ligon, C. C. Carroll, G. G. Thornton, D. W. Gaddie and Dr. Taylor in closing. On motion Dr. W. W. Taylor was made an honorary member of the Society. J. T. Green, of Leitchfield, read a paper entitled "Arteriosclerosis, and the Importance of Early Diagnosis and Treatment," which was discussed by G. G. Thornton, J. W. O'Connor and by Dr. Green closing. A. D. Wilmoth, of Louisville, read a paper on "Treatment of Acute Diffuse Peritonitis." The paper was discussed by R. C. McChord, C. T. Riggs, D. C. Bowen, W. A. Ligon and by Dr. Wilmoth in closing. On motion the Secretary was instructed to write letters of sympathy and condolence to Dr. C. J. Walton, of Munfordville and Dr. T. B. Greenly, of Meadow Lawn.

The Muldraugh Hill Medical Society embraces the counties of Green, Hart, Hardin, Bullitt, Jefferson, Meade, Grayson, Breckinridge, LaRue, Taylor, Marion, and Nelson. All doctors who are members of their county society are eligible to membership and are cordially invited to attend these meetings. Meetings held at Elizabethtown on the second Thursday in April, August and December.

H. R. NUSZ, Secretary.

Laurel—Laurel County Medical Society met December 19. The following officers were elected for 1907: J. C. Mason, of London, President; J. G. Owsley, of Lily, Vice-President; G. S. Brock, of Bush, Secretary-Treasurer. The Society meets quarterly. Our next meeting is March 20th, 1907.

G. S. BROCK, Secretary.

Crittenden—Crittenden County Medical Society met in the court house in Marion, Dec. 11. The President being absent the house was called to order by T. A. Frazer. The following mem-

bers were present: Drs. Daugherty, Driskill, Cook, Frazer, Fox, Gardner, Newcom, Travis, and Reynolds. Dr. Edwin Walker, of Evansville, was present and read a paper: "The Abuse of Purgatives." Dr. T. A. Frazer read a paper: "Things For the Doctor to Think About." Election of officers for 1907 resulted as follows: Dr. W. T. Daughtry, Marion, Ky., President; Dr. T. A. Frazer, Marion, Vice-President; Dr. E. E. Newcom, Repton, Secretary-Treasurer. Dr. Driskill moved that all papers on previous programs not read be erased.

I take pleasure in reporting the following members paid up for 1907: C. J. Moreland, W. F. Gardner, W. T. Daughtry, T. A. Frazer, A. J. Driskill, O. C. Cook, J. E. Fox, J. G. Wolfe, E. E. Newcom. Will report the others as soon as I can see them to get dues.

E. E. NEWCOM, Secretary.

Clark—Last Saturday, the day of our County Society meeting, was the rainiest day that any mortal ever saw. Notwithstanding this, however, quite a good crowd of doctors showed up. S. W. Willis, Winchester, R. F. D. No. 4, was chosen President; Howard Lyon, Winchester, Vice-President, and E. R. Cole, Winchester, Secretary-Treasurer. Dr. Willis was elected Delegate for the current year. Dr. Barrow, of Lexington read a most excellent paper on the subject of "Intestinal Cancer," urging that all obscure cases be sent to the surgeon before so far advanced that nothing could be done. Dr. McClymonds, of Lexington, came with him and was a welcome visitor. A sumptuous feast was enjoyed at the St. George Hotel. I. A. SHIRLEY, Secretary.

Boone—The Boone County Medical Society held a very interesting meeting Jan. 9th, in Burlington. Nine members were present and four were absent. Every one took an active part in the meeting, which added very much to its success. The following officers were elected for 1907: President, H. H. Hays; Vice-President, Y. F. Houkins; Secretary-Treasurer, W. O. Rouse; Delegate, W. J. Weindel; Censors, J. M. Grant, L. C. Hafer, I. C. Perkins. The following resolutions were adopted in regard to the Life Insurance question:—Whereas, Many of the insurance companies and fraternal societies have seen fit to reduce the fees of medical examiners to a fee not in keeping with the high standing of our profession, and in so doing rob the members of the medical profession of that which they so justly earn, and, whereas, the investigations of the various life insurance companies have shown the medical examiners to be gentlemen far above reproach and their work not tainted with corruption, and, whereas, the fate of all insurance

companies and fraternal societies and the future of the policy holders lie in the hands of competent and pains-taking medical examiners; now, therefore be it,

Resolved, That we, the officers and members of the Boone County Medical Society in session assembled together, with physicians of the county not members, most heartily declare that such reduction is unjust and an insult to our profession.

Resolved, That members of this Society and members of the Boone County medical profession insist on the minimum fee for all examinations to be five dollars (5.00) for old line companies having urinalysis examinations. Excepting fraternal companies where the burden of the examination is thrown on the applicant, and medical inspections where urinalysis is not made, to the above rate.

Resolved, That no member of this Society, enter into a written or verbal contract of any kind, with any corporation, society or association to examine for any fee less than stated above, or any sum or salary, to evade the foregoing resolution.

Resolved, That in the event of removal from the position of medical examiner for any society, association, or corporation of any physician who subscribes to the foregoing, that the brother members of the profession positively refuse appointment from any such society, association or corporation.

Resolved, That the Secretary of this Society obtain the signatures of every member of this Society and the medical profession of Boone County to these resolutions and that they be entered on the minutes of the Society and a copy be sent to the Kentucky Medical Journal for publication.

H. H. HAYS, President,

W. O. ROUSE, Secretary.

Trimble—The Trimble County Medical Society met December 31, in Dr. S. K. Fisher's office in Bedford. We had a full meeting, every doctor in the county being present. The following officers were elected for the ensuing year: F. W. Hancock, of Bedford, President; C. C. Fix, of Corn Creek, Vice-President; S. K. Fisher, of Bedford, Secretary; J. G. Contri, of Winona, Delegate to the State Medical Society; T. W. McMahan, one of Board of Censors. This meeting was the annual business meeting and the Society adopted the enclosed schedule of prices:

TO FORM A MORE UNIFORM SYSTEM OF CHARGES AND COLLECTIONS THE DOCTORS OF THE TRIMBLE COUNTY MEDICAL ASSOCIATION DO APPROVE THE FOLLOWING RULES AND REGULATIONS:

Whereas, there are some who make a practice of running doctors' bills with no intention of paying the same and, after the bills are made,

make no effort to settle, and, whereas, this is an imposition on the doctors: Now, we, the doctors of the Trimble County Medical Association, in order to protect ourselves, do enter into agreement that we will practice for no person without cash to whom the above named conditions apply; and finding that the conditions do apply we agree to abide by the following rules:

The party will first be notified of his indebtedness by the doctor who has done the work; after the expiration of thirty days he will again be notified by the same doctor; if he does not pay or settle satisfactorily, the account will be given to the Secretary of the Trimble County Medical Association who will notify the party, and, if the account is not paid or settled within thirty days thereafter, no doctor of this Association will practice for the offending party without cash until all bills due other doctors are paid or settled.

Schedule of fees approved by the Trimble County Association:

Office Work:—Ordinary prescriptions and advice, 50 cents to \$1.00, medicine extra—Physical examination, 50 cents to \$1.00—Special examination, \$2.00—Electricity and X-Ray work, \$1.00 to \$5.00.

Practice:—Day visits, first mile or fraction thereof, \$1.50—For each additional mile or fraction thereof up to 5 miles, 50c. Each additional mile or fraction thereof over five miles, within the country, 25 cents. For night visits one-third more will be added—Smallpox \$5.00 a visit—Consultation fee, \$10.00—Call visits, \$1.00—Urinalysis by request, \$3.00—Telephone advice and prescription, 50c to \$1.00—Vaccination, 50c—Extracting teeth, 50c—Disability certificate, \$1.00—Life insurance examination, \$5.00 to \$10.00.

Obstetrics and Gynecology:—Natural delivery, (cash) \$10.00—Delivery of placenta, (cash) \$6.00—Forceps, eversion or craniotomy (cash) \$10.00 to \$25.00—Turning, twins, \$18.00—Repair of laceration of cervix and perineum, \$25.00—Miscarriage, (cash) \$10.00—Uterine curettment, (cash) \$15.00—Uterine, tampon and douche, \$2.00—Vaginal examination, \$2.00, mileage extra.

Surgery:—Fitting trusses, etc., \$1.00—Administering anesthetic, \$5.00, mileage extra—Dressing wound, \$1.00 to \$5.00—Amputation of fingers or toes, \$5.00 to \$10.00—Reducing dislocation of ribs, \$5.00, mileage extra—Setting fracture of fingers, toes, ribs, \$5.00, mileage extra—Reducing dislocation of shoulder, elbow, wrist, ankle or knee, \$10.00, mileage extra—Reducing dislocation of hip, \$25.00—setting fracture of arm, forearm, leg, clavicle, \$5.00 to \$10.00—Setting fracture of thigh, patella or jaw, \$20.00—Excision of tonsils, \$5.00 each—removal of nasal polypus, \$5.00 to \$10.00—Plugging nares, \$5.00—Laryngotomy or tracheotomy, \$25.00—

Harelip, \$25.00—Ligation of artery (small) \$10.00—Ligation of artery (large) \$25.00—Opening boils, abscesses, etc., \$1.00 to \$5.00—Plaster Paris cast, etc., \$5.00—Hernia reduced by taxis, \$5.00 to \$15.00, mileage extra—Paracentesis, \$25.00—introduction of sounds and catheter, \$1.00 up, mileage extra—Hemorrhoids (external), \$20.00—Hemorrhoids (internal), \$30.00—Fissure, \$20.00—Gonorrhoea (in advance), first prescription, \$5.00 to \$25.00—Syphilis (in advance), \$15.00 up—Extracting foreign bodies from the throat, \$1.00 to \$5.00—Hydrocele tapping, \$1.00 to \$5.00 and mileage—Phimosis and Paraphimosis by circumcision, \$10.00—Venesection, \$2.50—Removing toe nail, etc., \$5.00—Removing needles, nails, etc., \$1.00 to \$5.00 and mileage—Administering diphtheria antitoxine, \$1.00 and mileage, antitoxine serum, extra—Irrigation of bladder, \$1.00 to \$3.00—Accompanying patient to hospital, per day, \$10.00 and expenses. — Approved by the Trimble County Medical Association. J. W. McMahan, President; F. W. Hancock, Vice-President; L. G. Contri, Secretary; W. A. Wright, M. D., B. O. Rand, M. D., C. C. Fix, M. D., S. K. Fisher, M. D., J. H. Calvert, M. D., C. P. Harwood, M. D.

Dr. S. K. Fisher, contemplating a change of residence, declined since the election to serve as Secretary, and requested Dr. Contri, the former Secretary to act for him as Secretary until the next meeting, when a new Secretary will be elected.

L. G. CONTRI, Acting Secretary.

Warren—The regular meeting of the Warren County Medical Society was held in the Doctors' Club Room Jan. 9th. The President being absent, the Vice-President, Dr. T. W. Stone presided. Twenty-five members were present. Dr. J. H. Blackburn opened the meeting with an address on Catarrh of the Gall Bladder, dwelling especially on the bacteriology of the disease. Dr. G. E. Huddle's paper on Biliary Colic included the treatment of Gallstones. The use of olive oil was condemned; sodium glycocholate was recommended to dissolve the stones. Several specimens of cholestrin sand were exhibited which he said was passed after the continued use of sodium glycocholate.

In the discussion Dr. A. T. McCormack said he did not consider gallstones a pathological condition unless symptoms due to the stones were present, and that there was no power in medicine or nature that could dissolve a stone in the gallbladder. A committee composed of Drs. Stone, South and Blackburn reported the following resolutions which were adopted:

Whereas, It appears from publication in the newspapers and otherwise that the State Board of Health has determined to take vigorous steps to suppress as far as it has power the crime of

abortion and, whereas, it is believed by this Society that this crime is far too prevalent in this county, therefore be it,

Resolved, That this Society approves of the circular letter on this subject recently issued by the State Board of Health, and we engage to do all in our power to assist the State Board in this matter, and as physicians engaged in the practice of our profession we want to put ourselves on record as being determined to bring to the bar of justice for trial any physician, druggist or other person who shall be charged upon apparently sufficient grounds with procuring or assisting to procure an abortion from any girl or woman.

Second, That we approve the action of Hon. John M. Galloway in calling the attention of the grand jury to the wide-spread evil and we ask the aid of the officers of the law in suppressing this crime and the punishment of all offenders.

CONTRACT PRACTICE.

While the evil of contract practice has not confronted the Warren County physicians, as a preventive measure, and also to help those societies that are struggling with this great problem, the following resolutions were unanimously adopted:

Be it: Resolved, That the members of the Warren County Medical Association pledge themselves to make no contract for doing medical practice for persons, lodges, firms or corporations at a fixed per capita sum payable at stated intervals, or for a salary which shall amount to less than the ordinary fee bill: **provided** this shall not apply to contracts by corporations for emergency surgical attention to their own employees.

The presiding officer called attention to the frequent use of unknown remedies and proprietary drugs whose attractive literature would deceive the most alert, and earnestly requested the members of the Society to prescribe only those preparations that have been approved by the Council on Pharmacy of the A. M. A. Drs. Rutherford, Huddle, McCormack were appointed as a committee and reported the following resolution and after a full discussion it was adopted:

Be it: Resolved, That the members of the Warren County Medical Association pledge themselves to prescribe no proprietary drugs or nostrums which have not been approved by the Council on Pharmacy, A. M. A., and that the Secretary be directed to supply each member with a list of such drugs as have been approved.

The following members have paid their dues for 1907. Doctors J. M. Adair, H. C. Beasley, J. H. Blackburn, W. A. Briggs, C. C. Brown, W. A. Callis, D. A. Campbell, J. O. Carson, F. D. Cartwright, H. P. Cartwright, E. A. Cherry,

W. H. Dickerson, W. P. Drake, G. F. Ewing,
 W. M. Ewing, W. A. Francis, W. R. Francis,
 G. H. Freeman, N. R. Fitch, J. W. Hackney, E.
 N. Hall, G. E. Huddle, J. D. Kelley, J. W. Lewis,
 A. T. McCormack, J. N. McCormack, W. H. Mc-
 Craeken, W. L. McGavie, E. M. Meador, J. W.
 Morrow, V. U. Moss, J. L. Neel, E. Rau, F. D.
 Reardon, J. F. Rodgers, B. S. Rutherford, W. C.
 Simmons, L. H. South, J. H. Souther, W. C.
 Strother, D. B. Stone, T. W. Stone, J. B. Thom-
 as, R. A. Thomas, G. E. Townsend, V. E. Tygret,
 G. E. Williams, J. K. Wood, J. F. Cook.

L. H. SOUTH, Secretary.

ROAST FOR KENTUCKY.*

Our State is sure a wonder,
 In oil, coal and mineral land,
 And great forests of good timber
 As thick as it can stand;
 A garden like that of Eden—
 We have so much of that
 The entire Blue Grass Region
 Which gives the ox his fat.

Chorus.

And yet it is a wonder,
 As such it seems to be,
 That a great State like Kentucky
 Is not what she ought to be.

The greatest earthly blessing
 That Heaven ever gives
 Is the pure Kentucky women
 As nice as they can live;
 Our horses are so speedy
 They move just like a charm,
 They prove it at the derby,
 On the road and on the farm.

Some great men of the nation
 Were born upon our land,
 There were Breckinridge and Davis
 A-standing hand in hand,
 While Henry Clay and Crittenden,
 Thought of neither war nor harm,
 Bill Nelson and Abe Lincoln
 Appeared to rule the storm.

Some drink the Belle of Nelson,
 'Till their eyes begin to shine
 Then wind up on Old Bourbon
 'Till they can hardly stand in line,
 They have so many pistols
 That shine so bright and slick
 The cylinder and trigger
 Always move too quick.

They seem to be so thirsty
 When they are in the mood,
 They assassinate their neighbor

And then they cry out "feud."
 We want pure Kentucky manhood
 And not "stuck up like dudes"
 To vote for high officials
 Who won't support a feud.

Warren — The Warren County Medical So-
 ciety held the annual meeting in the parlor of
 the Mansard Hotel on Nov. 13 at 10 a. m.,
 with Dr. D. A. Campbell in the chair.

Forty members were present and Dr. Grif-
 fith, of Owensboro, was guest of honor.

Dr. L. H. South read a paper on the Detec-
 tion and Immediate Repair of Lacerations of
 the Perineum.

The paper was supplemented with diagrams
 and demonstrations of instruments used.

Dr. W. C. Simmons, of Smith's Grove, pre-
 sented a paper on gastric ulcer, with report on
 an unusual case.

Dr. G. H. Freeman read a paper on the use
 and abuse of forceps with demonstration of axis-
 traction and high and low applications. All the
 subjects were fully discussed by the members
 from their practical experiences.

Dr. Griffith was elected honorary member of
 the Society. He gave a brilliant address on the
 value of county societies.

Muhlenburg—On Jan. 9th last the Muhlen-
 burg County Medical Society convened in
 this city. The feature of this meeting was
 the expected visit of D. M. Griffith, A.
 T. McCormack and J. W. Ellis, President,
 Secretary and Councilor respectively, of the
 Kentucky State Medical Association. The
 attendance was large, considering the extremely
 disagreeable weather. Much disappointment was
 expressed because of Dr. McCormack's failure
 to arrive. Drs. Griffith and Ellis, however,
 came according to agreement. They were es-
 corted to the Sandusky Hotel, where dinner was
 served. After this all went to Odd Fellows'
 Hall where the Society was called to order by
 President H. C. Kennerley. The minutes of last
 meeting were read and approved. A motion was
 then made to suspend the regular business in or-
 der that our distinguished visitors might address
 the Society without interruption. It was so or-
 dered. Dr. Griffith was then asked to address
 the Society.

He spoke along the lines of perfect medical
 organization, giving in clear and well chosen
 words the reasons for, the advisability of, and
 bringing out in no uncertain terms the great
 benefits to be derived from concentrated and
 united efforts. His argument was forceful, con-
 vincing and scholarly, and this, combined with
 his winning personality enabled him to easily
 hold the attention of his hearers while he per-
 manently impressed them with his logical rea-

*Toast delivered by Dr. R. D. Cox, at the meeting of the
 Kentucky Valley Medical Association at Campton Thursday,
 October 25.

sons and methods of building a society of sterling worth.

Dr. Ellis then took the floor. He, too, gained the respect and love of all who had the good fortune to be present. He stated that Dr. Griffith had so thoroughly covered the subject of organization, in fact had made his listeners so familiar with its every phase, that he had nothing left to discuss except the question of the fee for examination for insurance. He proceeded to demonstrate the wisdom of standing firm on this question, proving conclusively that in the end success is sure to crown our efforts, and in truth he displayed so much eloquence and knowledge in dealing with this important subject, that all present recognized in him a man well qualified to meet and dispose of any subject with rare skill and unerring judgment, whatever it might be.

Drs. Griffith and Ellis are both fluent and gifted speakers. They held their audience charmed while Trope and Metaphor flowed smoothly from their tongues and they proved the graces or the orator's art to be, to them, well known. Such thoughts, from such men, delivered with such honest zeal, could not fail to bring forth the desired results. Those present caught the spirit, as manifested by the many responses endorsing all that was said and promising hearty co-operation. I feel that the feeling of fellowship aroused by this meeting will continue to flow over our county, gathering strength with every obstacle surmounted, until all desirable physicians are zealous members of our Society. We thank the courteous gentlemen for their kind assistance and what to us was a pleasant visit. We are sorry they could not stay longer. And we sincerely hope that some day not far distant they will again favor us with a visit.

S. T. TAYLOR, Secretary.

Carlisle.—The Carlisle County Medical Society met at Bardwell, December 4th. The following officers were elected: President, W. T. Graves, R. F. D. No. 1, Bardwell; Secretary, W. E. Gholson, Kirbyton; Treasurer, W. L. Mosby, Bardwell; Delegate, R. T. Hocker, Arlington. The Society will meet at Arlington March 7th, at Kirbyton, June 4th, at Cunningham, Sept. 3rd, at Bardwell, December 3d.

E. B. WILLINGHAM, Secretary.

Boyd.—The following have agreed to sign the resolutions in Boyd County: Smithfield Keffer, J. M. Salmon, W. L. Gambill, H. S. Swope, George W. Moore, A. H. Moore, J. A. Sparks, J. M. Prichard, E. M. Sellards, W. A. Berry, W. W. Morton, P. C. Layne, A. T. Henderson, J. W. Kincaid, J. D. Williams, B. S. Rice, F. V. Oblinger, L. T. Hood, John H. Wade, W. O. Eaton, J. W. Martin, F. M. Griffin.

Our Society has abolished contract practice and also adopted the following fee bill: Calls in Ashland and Catlettsburg from 6 a. m. to 6 p. m., \$1.00; from 6 p. m. to 9 p. m., \$1.50; from 9 p. m. to 6 a. m., \$2.00.

SMITHFIELD KEFFER, Secretary.

Todd.—The Todd County Medical Society met in Elkton Jan. 2. House called to order by President J. M. Robinson; minutes of previous meeting read and approved. On motion the program selected by committee appointing essayist and subjects for the current year was adopted, and Secretary instructed to furnish each member with typewritten copy of same. On motion the resolutions adopted by so many of the county societies in the State in regard to fees for examinations for Life Insurance Companies were unanimously adopted, and Secretary instructed to sign same by order of the Society. Owing to the inclement weather the attendance at this meeting was small. No papers read, but the day was profitably spent in discussion of clinical cases. The following members were appointed to read papers at the next meeting: L. P. Frasier, "Accidents of Labor;" T. W. Perkins, "Management of Normal Labor;" J. M. Robinson, "Management of Abortion and Mis-carriage." There being no further business the meeting adjourned.

L. P. TRABUE, Secretary.

Bullitt.—This Association shall be known as the Bullitt County Life Insurance Examiners' Association. The members of this Association hereby agree and bind themselves jointly and severally not to make any examinations for any life insurance companies for a sum less than \$5.00, and hereby pledge and indorse their support to the resolutions adopted by the Kentucky State Medical Association in convention assembled at Owensboro, Kentucky, October 10, 1906, and agrees to do everything in our power to further the purposes of these resolutions. And we further agree to subscribe to such necessary rules and by-laws as the committee shall deem requisite for the proper organization of the Association. Wm. S. Napper, Chas. O. Tydings, I. T. Houck, S. J. Fryer, R. L. Hackworth, S. W. Bates, A. C. Overall, G. W. Kirk, W. G. Shacklette, P. Hardin, J. E. Johnson, J. Gil Dodds, S. W. Ridgway, W. W. Coleman.

Monroe.—At a meeting of the Monroe County Medical Society held at Tompkinsville, Ky., Thursday, Dec. 20, Dr. O. P. Hamilton of Gamaliel, Ky., was elected President, Dr. Geo. W. Bushong, of Tompkinsville, Ky., Vice-President; E. E. Palmore, Strode, Ky., Secretary-Treasurer. Dr. W. A. Sympton, of Tompkinsville, Ky., was elected Censor. Dr. England reported five sets

of twins in fifty labors for the year. Adjourned to meet at Tompkinsville, Ky., Thursday, Jan. 17, 1907. E. E. PALMORE, Secretary.

Clinton—The Clinton County Medical Society met December 31. The following officers were elected for 1907: President, J. A. Sloan; Vice-President, E. M. Koger; Secretary, F. W. Huddleston; Treasurer, S. F. Stephenson; Board of Censors, Drs. Cook, Stephenson and Norris. Drs. Huddleston and Norris were elected to membership. The proceedings were according to the published program, and a number of interesting clinical cases were also reported. Our Society is in splendid condition and we expect to accomplish much good during the coming year. The following members paid their dues for 1907: Drs. Sloan, Stephenson, Cook, Norris, Koger and Huddleston.

F. W. HUDDLESTON, Secretary.

Shelby—The meeting of the Shelby County Medical Society was held in Shelbyville, December 20th, with a majority of the members present. An essay on "Pleurisy with Effusion" was read by Dr. Egger and discussed by those present, including our visitors, Drs. Bowen, of Elizabethtown, and Wilmoth, of Louisville. We were happy indeed to have Dr. Bowen, our Councilor, with us, and much benefit will be derived from his talk upon organization of the medical profession in Kentucky. We are glad to be transferred to Dr. Bowen's district, as he is the only councilor that has ever visited our Society, and we think we have one of the best, especially in the last year. We are having regular monthly meetings and usually have two, sometimes more essays.

S. L. BEARD, Secretary.

Harlan—I take pleasure in enclosing dues for W. T. Nolen, N. S. Howard and G. P. Bailey for 1907—every doctor in the county.

G. P. BAILEY, Secretary.

Rowan—The following members of the Rowan County Society have paid their dues for 1907: J. Wilson, A. L. Blair, Alex Skaggs and W. W. Johnson.

W. W. JOHNSON, Secretary.

Ballard—The dues for 1907 for the following members are paid: N. W. Hilton, E. B. Shelton, W. J. Stevens, H. V. Usher, T. M. Baker, J. B. Payne, T. J. Davis, and J. F. Hahs. Will send others soon, as we did not understand that it was due until April.

H. V. USHER, Secretary.

Jefferson—At the annual meeting of the Jefferson County Medical Society, held in Decem-

ber, at the Galt House, the following officers were elected: President, Sidney J. Meyer; Vice-President, Dunning S. Wilson, Secretary, Chas. W. Hibbitt; Treasurer, Virgil E. Simpson. This promises to be the most successful year in the history of our Society.

CHAS. W. HIBBITT, Secretary.

Ninth District—All of our doctors, members and non-members, in Boyd County have signed the insurance fee agreement.

At the same time we settled the **bone of contention**, contract practice and cut fees. A motion was unanimously passed that we establish a fee bill and abolish contract practice. This is a good victory over those elements of disorder and disunion which threaten our profession everywhere and I am glad to say that I believe every physician in Boyd county will stand together for a better organization—thereby making themselves better doctors.

J. W. KINCAID,
Councilor Ninth District.

Franklin—The Franklin County Medical Society held its regular monthly meeting January 5th. The following members were present: Drs. Ely, Williams, Montgomery, Monfort, Mastin, Hume, Minish, and Martin. Minutes of the last meeting were read and approved. A paper on "Ophthalmia Neonatorum" was read by Samuel H. Martin and discussed by Drs. Minish, Williams, Hume, Monfort, nad Montgomery. Dr. Williams protests strongly against the use of ice cold pedgets of cotton soaked in a 1 to 2000 solution of the bichloride of mercury as a preventive in allaying the inflammation not only in this disease, but in any kind of inflammation. He, however, suggests that zinc oxide be blown into the eye twice a day or zinc oxide ointment to be rubbed on the conjunctiva. Dr. Ely recommended adrenalin and argyrol as being the most reliable drugs in his experience. Dr. Montgomery read a paper "Treatment of Pneumonia" and it was discussed by Drs. Williams, Ely, Hume and Minish. Society adjourns until the first Saturday in February. Dr. U. V. Williams, Referee for Franklin County, was omitted in the minutes of the January Journal.

SAMUEL H. MARTIN, Secretary.

Anderson—The Anderson County Medical Society met January 7th, at Dr. Paynter's, L. O. Pindar, the President, presiding. Those present were Drs. Davis, Pindar, Toll, Lillard, Paynter, Gilbert, Murdock and Johnson. C. M. Paynter read a paper, "Surgery of the Country Doctor," emphasizing the point that the country doctor may and should always be clean, and that, where boiling water or an oven are, he may always have aseptic instruments and dressings. He

spoke of the importance of an accurate knowledge of your patient's general condition as well as of the particular locality of the wound or injury. He believes no man is competent to be a specialist in any line until he has done general practice. The paper was discussed by Drs. Davis, Johnson, Murdock, Lillard, Gilbert and Toll. Dr. Murdock made a talk on "Professional Protection Against Dead Beats," which was enjoyed and discussed by all present. Drs. Murdock, Paynter and Lillard were appointed a committee to formulate some plan for the protection of the profession. Drs. J. R. Johnson and J. W. Gilbert were elected as members.

The following resolutions were unanimously adopted:

Whereas, Perfect independence on the part of the medical examiner toward the applicant for insurance is necessary for the best interests of all concerned, and

Whereas, This can be best obtained by the appointment of the examiner being made by the head medical department rather than by local agents or representatives therefore be it,

Resolved, That the Anderson County Medical Society commends and endorses the action of the Ladies of the Maccabees in this respect and recommends and requests that other orders follow their example.

Whereas, It is a universally admitted fact that the Medical Examiner is the safe guard of the life insurance business and that competent men are worthy of a proper fee for their work, and

Whereas, We believe that those insured in the different Fraternal Orders and depending on them for protection to their families are entitled to the same degree of security as those insured in the "Old Line" companies, therefore, be it

Resolved, That the Anderson County Medical Society recommends and requests that the Fraternal Insurance Orders raise their fees for medical examination to five (\$5.00) dollars, the fee now demanded from all "Old Line" companies by reputable companies.

Adjourned. J. W. GILBERT, Secretary.

To the Editor:—As you invite communication on the "contract practice" question, I write to say the evil is with us here and I consider it a burning question, as does Dr. Simmons. Here is a case in point in Jefferson County. A recent graduate of a Louisville school made a contract with the employes of the Kosmos Portland Company to do their practice for **one dollar per month**. This includes attention to their families, confinements and surgery—in fact he told me he would use forceps (if he could) under his contract. He obtained about sixty contracts with

individuals, but none with the company. Drs. Foss, Tydings, Crutcher, Morrison, Roberts do not recognize him as reputable, ethical or professional. A surgeon does the surgery for the "contractor," but I believe he is ashamed of the association with the man. I am reliably informed that this "contractor" is upheld by two or more professors in a medical college in Louisville who are members of the Jefferson County Medical Society. We were advised by the above members not to bring the question before the Society, as the "contractor" would have no trouble in getting consultants from the city, and that we are "cutting off our noses to spite our faces."

A. B. APPLEGATE,

Kosmosdale, Ky.

[The condition described by Dr. Applegate is an appalling one. It emphasizes the importance of the recent requirement of the State Board of Health that a Chair of Ethics and Economics be created. If there are any medical teachers anywhere who would uphold one of their graduates in such a contract as the one detailed, it is evident that they should take such a course. No doctor anywhere can do the practice for 60 families, averaging 300 persons, for 20 cents per capita. He is cheating his patrons, his profession and, least of all, himself. It actually costs a doctor more than this to properly equip himself for such practice. Our readers will notice elsewhere that Boyd County has settled this question, and we trust every county in the State will do likewise.—Ed.]

Scott—The Scott County Medical Society held its regular quarterly meeting in City Hall December 6th, Dr. D. B. Knox presiding. Those present besides the President, were: Jno. A. Lewis, A. B. Coons, L. F. Heath, W. G. Moore, R. L. Carriek, E. C. Barlow, W. D. Scott, and W. H. Coffman. L. F. Heath read a short and concise paper on Diphtheria, very fully covering all the ground. He concluded the discussion by reporting a recent case in which a girl—5 or 6 years of age—the membrane first appeared in the vagina and he was called to treat the patient for this condition. Two or three days later the membrane appeared in the throat with all the diphtheric characteristics. Antitoxine and the usual local and general medication was employed, but to no avail, death occurring within 3 or 4 days after membrane appeared in throat. Dr. D. B. Knox furnished a paper on Gallstones, going very fully into the subject. Aside from drainage of gall bladder the next important step in treatment is often repeated cholagogues, thereby

hoping to deplete the parts adjacent to the offending stone or stones. The election of officers resulted as follows: President, A. B. Coons, Newtown, Ky.; Vice-President, W. G. Moore, Georgetown; Secretary, Jno. E. Pack, Georgetown; Referee, R. L. Carrick, Georgetown; Delegate, Jno. E. Pack, Georgetown; Alternate, L. F. Heath, Minorsville; Censors, A. Stewart, 1 year; R. L. Carrick, 2 years; W. S. Allphin, 3 years. Program next meeting.—C. T. Lancaster, "Pneumonia;" P. H. Crutchfield, "Chronic Rheumatism;" W. P. Foreman, "Prostatitis;" J. A. Lewis, "Cystitis." After adjournment Dr. Jno. A. Lewis entertained the Society at dinner.

JNO. E. PACK, Secretary.

Fleming—Whereas, Many of the old line life insurance companies have reduced the medical examiner's fee so that the maximum fee for making examinations of applicants for \$3,000.00 and less is \$3.00, and as the physicians of Fleming County, Ky., deem this action unjust, unfair and derogatory to their financial interests, Therefore, be it

Resolved, That the members of the Fleming County Medical Society with all other physicians of this county, agree to adhere to and comply with a fee bill rate of \$5.00 for making all and any life insurance examinations. That any arrangement for increase of fee to agent shall not be accepted, but that the special arrangement must be made between the medical director of the company and the medical examiner.

Resolved, That the Secretary of this Society obtain the signature of each and every physician of this county to this resolution, and that a copy of this resolution with the signatures of all the physicians be sent by him to all the companies that have made a reduction in the medical examiner's fee. Chas. R. Garr, John C. S. Brice, A. M. Wallingford, Jr., A. M. Wallingford, Sr., S. F. O'Brien, A. S. Robertson, T. B. Vice, J. B. O'Bannon, H. C. Kehoe, W. H. Conway, W. J. Morgan, W. B. McClure, H. H. Morgan, E. T. Runyon, Walter W. Fugit, John A. Minish, W. W. Dye, Archibald L. Morford. Jas. Thompson, H. B. Myers, T. Ribelin, H. S. Gilmore, R. M. Skinner, J. S. Hood, W. G. Armstrong, R. H. Yantis.

Henderson—The first regular semi-monthly meeting for January of the Henderson County Medical Association was held in the office of Dr. Benj. Vaughan, Jan. 14, 8 p. m., with an attendance of fifteen members. Dr. H. S. Forwood, President. Dr. Vaughan read a short, pithy paper on "Meningitis," in which he discussed the simple and tubercular varieties. He divided them anatomically into pachy meningitis, or inflammation of the dura mater; leptomenigitis, or inflammation of the pia mater, and basilar meningitis, when the base of the brain is involved. Et-

ologically, the active cause always some micro-organism though recognizing certain well-defined predisposing causes; such as fractures or caries of the cranial bones, otitis media, diseases of the frontal sinuses or of the upper air passages, and the infectious diseases, pneumonia being the most frequent in which the organisms are carried by the blood to the brain. Congestion and effusion prominent. Cardinal symptoms:—headache, fever, delirium, characteristic vomiting. Certain symptoms being more marked, according to the area of the brain involved. Tubercular meningitis, being characteristic and manifesting well-defined symptoms, with a grave prognosis. Treatment:—Palliative and symptomatic. He insisted on giving careful attention to the mouth, nose and air passages in the acute infectious diseases. Dr. Edwards read a paper on "Locomotor Ataxia." He emphasized the fact that the pathology of locomotor ataxia begins in the ganglia of the posterior roots of the spinal nerves, and that other tissues were involved only secondarily. Also that it is not an exudative inflammatory process as in syphilis, hence anti-syphilitic treatment is contra-indicated. He urges every diagnosis to be made from pain and areas of analgesia, etc. Rest, forced nutrition, with palliative remedies constitute the treatment. The papers were discussed separately. The leader of the discussion, who was selected beforehand was limited to ten minutes. Others who followed limited to five minutes. President Forwood appointed Drs. Moseley, Stone and Graham a committee on public health and legislation for 1907.

The program for January to June, inclusive, was submitted, approved and ordered printed. The city of Henderson having made a reduction in the salary of health officer, Dr. Moseley announced his resignation, alleging that the work could not be properly done for the amount as fixed. On motion a committee was appointed to appear before the city council to endeavor to have a salary adequate to the importance of the office fixed, it being the sense of the Society that no member would take the position at the salary as fixed. The next meeting will be in the office of Dr. W. W. Wilson, Henderson, Jan. 28.

Papers:—Coma, Dr. Poole; Hysteria, Dr. Armstrong; Neurasthenia, Dr. Wilson. Society adjourned.

SILAS GRIFFIN, Secretary.

Caldwell-Lyon—The Caldwell-Lyon Medical Society met in Princeton to-day and elected officers for 1907. We know that this should have been done in December, but we were unable to get a quorum at the December meeting. The following officers were elected to-day:—C. H. Lynn, Kuttawa, President; John D. Mott, Crider, Vice-President; R. W. Ogilvie, Princeton, Secretary and Treasurer; W. G. Kinsolving, Dulaney, Delegate to the State Society and W. S. Stone, Alternate. Drs. E. S. Wilford, I. Z. Barber and W. S.

Stone, Censors. Dr. E. S. Wilford, of Kuttawa, joined the Society to-day and Dr. W. S. Stone transferred his membership from the Marshall County Society to the Caldwell-Lyon. We had a very warm discussion on the insurance fee question and all members present except two signed the resolutions you sent me some time ago. The following members are the ones who signed: J. A. H. Miller, W. G. Kinsolving, W. S. Stone, Chas. J. Pollard, Z. T. Cunningham, John D. Mott, A. D. Purdy, I. Z. Barber, C. N. Meriwether, John B. Wadlington, John N. Todd, Lee Dorroh and R. W. Ogilvie. Only thirteen or fourteen members have paid their Society dues for 1907 and I will wait a while before sending in the lists you sent me a few days ago as I am anxious to make as good showing as possible this year. The Caldwell-Lyon Society will meet in Princeton on the second Tuesday in February.

R. W. OGILVIE, Secretary.

Barren—We held our last meeting for the present year on December 11th. This has been a good year for the Barren County Medical Society. We have had a good attendance at most all of our meetings, which have been both interesting and profitable. Our membership during the present year has increased from 20 to 28 members, and there are now only 2 or 3 practitioners in the county who are not members of our county society, and we hope this ensuing year to take them all in. At our last meeting we elected the following officers for next year:—For President, C. W. Froedge; Vice-President, F. J. Taylor; Secretary and Treasurer, R. S. Plumlee; C. G. Depp, Delegate to the State Medical Society; R. E. Garnett, Censor. We have quite a number of aggressive, active young men, who are taking a lively interest in our Society. We are all standing pat on the insurance question; the fee for examination is five dollars or nothing, and the insurance companies are all so far as I know complying with our demands.

Dr. McCormack, you are engaged in a good work. The medical profession, it has been said, is the noblest save that of the ministry, but I think I can truthfully say that there are many doctors doing a nobler work for humanity than are many preachers. At any rate the betterment of our profession is a noble work, and I bid you great success. Let us cultivate a friendlier spirit. Let us expand a little more the social feature of meetings. In the country I think it would do well in the summer and autumn months, to change our meetings, and accept the hospitalities of our professional brethren in the different towns and villages. I think this would work well

and create a more fraternal feeling in our societies. Very sincerely,

F. J. TAYLOR.

Green—The Green County Medical Society met in the Y. M. C. A. Hall at Greensburg, January 3rd, 1907. The following members were present: W. J. Risen, President; E. L. Thompson, Vice-President; H. P. Honaker, D. G. Skaggs, J. J. Booker, E. L. Strader, O. H. Shively, B. M. Taylor and Dentist J. M. Johnston. This being the annual meeting, the Society, after being called to order by the President, proceeded to the election of officers. Edward L. Thompson, of Pierce, was elected President, David G. Skaggs, of Summersville, Vice-President; Ernest L. Strader, of Greensburg, Delegate to the State Association, and B. M. Taylor, of Greensburg, Secretary. E. L. Thompson, in a short and pointed talk thanked the Society for electing him President and outlined the work for the Society for the year. He said that the Secretary and President might do all that is required of them and get up attractive and instructive programs for the meetings and repeatedly encourage the members to attend, but if the desire to learn more about things medical was below par, the attendance and interest would be below what it should be. He said that he wanted every doctor to use every opportunity to educate the laity upon the subject of public sanitation and hygiene, the prevention of the spread of contagious diseases. Pure milk and food, the proper care of infants during the summer, the care of the teeth, and diseases carried by house flies and mosquitoes, and that all consumptives should be taught how to care for the expectoration in order to prevent infecting others.

The Society agreed to outline a systematic line of study for the year. The forenoon will be devoted to report of cases, presentation of clinical cases and demonstrations with the microscope. The afternoon will be devoted to papers upon a subject outlined at the previous meeting. The March meeting will be a symposium on obstetrics and the examination of the blood with stains and the blood counting apparatus.

The Society adjourned at twelve o'clock to the residence of B. M. Taylor, where dinner was served to the Society.

After dinner J. M. Johnston, dentist, read a paper on "The Forceps In the Hands of the Practitioner." He said that doctors often prided themselves on having "pulled" a bucket full of teeth. He dwelled especially upon the abominable and dangerous practice of doctors extracting the six-year molars in children because they had a small cavity in them and ached when anything sweet was being eaten. He said it was like extracting the key-stone of an arch. This is a permanent tooth and when extracted the

whole dental arch was thrown out of line and the teeth grew crooked and consequently their power of mastication lessened and decay hastened by undue wearing.

Dr. W. J. Risen read a paper on Tonsilitis. He reviewed the treatment thoroughly and the paper was discussed by all present. Each member laying special stress upon isolating children with tonsilitis and using a gargle of equal parts of water and peroxide to cleanse the throat before eating or drinking. That many cases of gastritis were the result of infection from tonsilitis. It was thought very wise to teach the laity to send for a doctor in all cases of sore throat and not try to treat it with simple remedies. That many cases of sore throat proved to be diphtheria upon the arrival of the physician and the case dies before antitoxine has time to afford relief.

The Society, after adopting and signing the resolution on the insurance fee question as offered by the Secretary of the State Association, adjourned to meet again March 7th.

B. M. TAYLOR, Secretary.

USING THE ELASTICITY OF THE LUNG TISSUE IN THE TREATMENT OF DISEASE AND INJURIES OF THE THORAX AND ITS CONTENTS.*

By E. W. FORD, M. D., HARTFORD.

The elasticity of lung tissue that I have reference to, is not that elastic contraction of the lung in normal expiration, nor even in forced expiration, but the ability to return to that collapsed condition that exists prior to birth or before its expansion by the entrance of air through the trachea. So, I may have taken a misleading title to express this function of lung tissue; however, this power or force of contraction of the elastic tissue has been estimated to be equal to one-half pound per square inch of lung surface. Now, if the lung is distended by the ordinary lung pressure of fifteen pounds to the square inch, applied to the inside of the lung, by way of the trachea, the surface of the pleural sac will be constantly maintained in apposition. These functions are splendidly explained in Chapman's work on Physiology.

Suffice it to say that the lung always collapses when the air pressure on the outside of the lung is allowed to equal that on the inside, unless hindered by some mechanical obstruction, such as a foreign body in a bronchus, solid tumor or lung, or adhesions of visceral and parietal pleura.

Now this is the peculiar function or action

of lung tissue that we suggest be used in the treatment of diseases or injuries. To remind you of this force, in normal breathing, how is the diaphragm restored to its dome shape after each inspiration, unless it is by the air being rarified in pleural cavities and the pressure of air over abdomen pushing it into place?

To illustrate: Some years ago I saw, at a post mortem in the Altoona, Pennsylvania, Hospital, a man who had a perforated diaphragm of long standing, and the cardiac end of the stomach had become permanently dislocated to the region of the heart, through this action, the lung being completely collapsed. While I had known of this function, and every physiologist knows of it, yet its importance and usefulness was impressed upon me by accident, or rather ignorance, as shown in the history of Robert Gillians, aged 18, weight 150 pounds, who was shot August 22nd, 1891, the ball .32 calibre, passing through the left arm and into left lung, at about the fourth intercostal space in front. Six months, or on February 17th, 1892, his condition was as follows: Emaciated, chills, and fever to 104. sweats, cough harassing, both pus and blood being expectorated, pus escaping from bullet wound, especially when coughing, the heart crowded upward, and to right of sternum, left side of thorax distended and intercostal spaces bulging. Thinking the pus was in his pleural cavity, I proceeded to drain, by making an incision in posterior axillary line and in seventh to ninth interspace, but the cavity was normal and free from pus, but put in a rubber tube, which acted as an inlet for air. The next day I found him on the bed with face over a coal bucket, and pus flowing from mouth, but none from sinus. The family assured me that the bucket had been full, or nearly so, fever reduced and he was in a much better condition. Within ten days he came into town, clear of fever and had a splendid appetite, weighing 116 pounds. Within one month his cough and expectoration ceased. After this the tube was removed, the opening soon closed and the lung began to expand as the air in the pleura was absorbed, and after a few months he became able to do manual labor, and is yet living and well.

What happened in his case, was the air pressure on the inside of lung was equalized by that on the pleural surface, and there being nothing but this great collection of pus to oppose the contraction of the elastic tissue, it was simply forced through the trachea, barely allowing room for respiration from the right lung. Afterwards the same action furnished the drainage and the abscess healed, likely as any other, the ball becoming encyst-

*Read before the Kentucky State Medical Association, Owensboro, October 10, 1906

ed; as I do not not remember of it being disposed of otherwise.

Now, I believe this function could be used well in most cases of abscess of lung, from whatsoever cause, and especially if the abscess is in communication with a bronchus; also in severe hemorrhage from lung, either from disease or injury, I believe by using a local anæsthetic, that a small opening could be made without pain or danger, allowing the lung to collapse slowly, that the flow would stop at once, then seal up the wound.

In active congestion or inflammatory disease of the lung tissue of one side only, it seems to me that it might prove a useful remedy by giving the diseased organ a complete rest.

In instances where foreign bodies become lodged in a bronchus, to allow the lung to collapse, make an opening in chest wall to insert the hand, and grasp and locate the body and remove by some blunt pointed forceps, would seem to be entirely rational.

In heart surgery, the lung would disappear from the field and many other conditions that I do not now think of, and while I may not claim originality for the idea, yet I have never seen it advocated.

Some have dilated the pleural cavities with gas or air by pumping and claimed to obtain excellent results.

* * * *

DISCUSSION.

Dr. Garland Sherrill, Louisville: An observation of this kind certainly is worthy of some discussion. The idea seems to have been impressed on Dr. Ford that use could be made of the elasticity of the lung tissue by discovering that the abscess was made to empty itself by forcing air into the chest through an external opening. The pus which was confined in some portion of the lung was forced out by the contractility of the lung tissue.

The suggestion he makes of letting in a small amount of air for this purpose, I think, was suggested some time ago by Dr. J. B. Murphy, of Chicago. He used nitrogen gas passing it into the chest cavity so as to forcibly compress the lung tissue. In cases of hemorrhage of the lung this would be checked immediately and in that way the patient's life might be saved. Of course, this plan of treatment would not be applicable in cases where the hemorrhage is profuse or from a very large vessel. Under these circumstances the only possible way to save the life of the patient would be a free exposure of the chest cavity by the resection of one or more ribs, if necessary, and to grasp the bleeding point with the fingers and compress the vessel in that way. The suggestion of Dr. Ford might be utilized in some cases.

Dr. James B. Bullitt, Louisville: I think that Dr. Ford's observation is one of great interest. It is papers of this kind that we are glad to have presented before the Society, the results of observations made in actual practice. Cases of this kind can be brought before a society of medical men with great profit, and the deductions that the Doctor made are reasonable ones. The only word I wish to add is this:

Dr. Murphy, of Chicago, suggested the injection of air into the chest cavity for just such a purpose as Dr. Ford indicated. It is not necessary, however, to make an opening into the chest wall with a knife. The same effect can be obtained more easily and more conveniently. Dr. Murphy takes a hypodermic needle of large size and passes it through the wall of the chest. This needle is left in place and with each inspiratory effort a certain amount of air is sucked into the pleural cavity. If the needle is left in place long enough, the pleural cavity will be filled with the air and the lung is compressed most effectually.

If it is desired to more quickly produce pressure or to produce a greater pressure than can be secured in this way, a simple device is to attach a Davidson's syringe to an aspirating needle and pump air into the chest cavity when it will come to occupy its position under greater pressure than normal. The air can be left alone to take care of itself. It is absorbed gradually.

The theory has been advanced, and with some probability of good application, that in certain cases of hemorrhage from the lungs the hemorrhage can be arrested in this way. I believe that in most cases of hemorrhage that will come to the doctor in an emergency this is the only method which it would be reasonable to adopt under such circumstances. The emergency is of the utmost gravity; the ability to cope with it by opening the chest wall and directly grasping the bleeding vessel is extremely remote. It would require a very large section of the chest wall in order to directly grasp a vessel under these circumstances, and before this could be accomplished the chances of the patient would be seriously impaired. Therefore, I believe that it is of the utmost importance that we should all bear in mind that this plan of procedure can be applied very simply. It requires nothing more than an ordinary hypodermic or aspirating needle, and a Davidson's syringe, and these things can be had in every community where there is a doctor. This plan of compression can be employed in any emergency that may arise. Dr. Ford is to be congratulated on the presentation of his paper.

Dr. Arthur T. McCormack, Bowling Green: I enjoyed Dr. Ford's paper very much, particularly because I have had some experience with the method he describes. I used the appa-

ratus devised by Murphy for filling the pleural cavity with nitrogen first in a case of tuberculosis in which the prognosis was extremely bad. The patient had been losing ground rapidly. He seemed to gain for some six or eight weeks, but soon died. I have kept the apparatus not with the expectation of using it again in tuberculosis, where it seemed to fail to produce results, but to use it in a traumatic case.

I have always wondered whether the use of such an apparatus or procedure in a case of gunshot wound of the lung, such as Governor Goebel suffered, would not have affected compression of the lung so as to avoid the certainty of foreign body pneumonia, as in his case, caused by the piece of overcoat found in the lung.

This is an extremely interesting and practical paper, one which I am sure promises great results in a field where we have had practically nothing except mortalities.

Dr. Ford, Closing the Discussion: The only advantage which I can see in making an opening instead of inserting a needle is to maintain a constant pressure on the lung. If you inject either air or gas it will soon be absorbed and then the object gained in allowing the air to enter is nullified, or you must be pumping in air all the time. I read Dr. Murphy's article and I referred indirectly to it and to others in my paper. I suppose that it would be all right to leave the needle in place if it did not cause too much irritation, but, I think, that the main object to achieve in these cases of abscesses of the lung is to allow the pressure to be made continuously so that the abscess is drained thoroughly and thus heal up. In the instance I cited, I believe that if the pressure had been relieved in a week or less time the abscess would have refilled again.

THE PRESENT STATUS OF TREATMENT OF ACUTE AND CHRONIC SUPPURATION OF THE MIDDLE EAR.*

DR. J. A. STUCKY, LEXINGTON, KY.

In presenting a paper on suppuration of the middle ear to the general practitioner, we congratulate ourselves that medical science is more nearly related to the fixed Sciences than ever before, and in no branch has more rapid and satisfactory progress been made than in Otology. The line of demarkation between the otologist and general practitioner is only one of degree, and in many respects faintly drawn.

The acute cases are first seen by him, and the larger number of chronic cases are still under his observation and guidance. It is for these reasons that the discussion of this topic is deemed timely. The results and conclusions of five years ago, are not those of to-day, so marked and gratifying has been the progress of otology.

We no longer treat symptoms, then wait for results as has been the case so often with the victim suffering from ear ache. The rule now is to see what the trouble is, then do something for it. In the past this rule has been more frequently reversed and something was done without bringing into use the visual organs, unless subsequent results were of a sufficiently serious nature to call for anxiety and alarm. It may be stated with marked emphasis that every ear ache or symptom of inflammation in the ear is worthy of specially careful examination, for if the acute or primary trouble is recognized early and appropriate treatment begun promptly there will be fewer cases of mastoid involvement and chronic suppuration to deal with.

For this reason it is just as incumbent upon the general practitioner to have a working knowledge of the use of the ear speculum and head-mirror as of the tongue depressor and stethoscope. Taking this for granted as soon as called to a case of pain in the ear the auditory canal and tympanum should be carefully inspected for the cause, and if there be any redness or tension of the drum-membrane the canal should be thoroughly irrigated with normal saline solution and bi-chloride of mercury, 1 to 3000, after which fill with alcohol, which is allowed to remain a moment in order to make more effectual the sterilization. Considering that the presuppurative stage—or the acute inflammatory stage, in the majority of instances, is serous, we should not wait for active inflammatory evidence and manifestations of pressure in the middle ear cavity as shown by redness and bulging of the membrane, but make a free incision at the earliest possible moment; in children this is preferably done under an anesthetic, since that gives you an opportunity to make the cut deliberately and to make it large enough. A simple puncture—(paracentesis) should not be made, but instead a *myringotomy* or free incision from the posterior inferior quadrant, along the margin, clear up to and including Shrapnell's membrane, and incising as a rule about one-third of the entire posterior periphery of the drum. After this wipe out the blood and serum with sterilized cotton and insert a narrow strip of plain sterile or iodoform gauze

*Read before the Ohio Valley Medical Association, Louisville, November, 1906.

and endeavor to keep the discharge serous. The gauze drain should not project beyond the external opening of the canal, the meatus being loosely filled with sterile absorbent cotton.

It is not necessary to change the first gauze for twenty-four hours, or even longer, provided the cotton pledget in the outside of the ear is replaced as often as it gets wet, since this gauze simply acts as a wick. If this fails, as it frequently does, have the gauze drain changed twice a day, or in cases of families where they cannot handle the gauze, it is better to have a small piece of cotton placed lightly in the meatus and changed at least four times a day, or oftener if it becomes soaked with the discharge.

The point made by Richards is well taken—i. e., "it is easier to teach the average mother to handle cotton which she can use on a tooth pick or something of that nature."

If the case proceeds to suppuration irrigating twice daily, with warm normal saline solution to which some preparation of alphozone of hydrogen has been added to the strength of 1 to 3000, after which protect the canal with cotton. If the acute suppuration is accompanied by mastoid pain and tenderness, I apply dry heat or one of the clay preparations. Either of these have done what good they will do in 48 hours. Moist heat of any kind or cold is mentioned only to be condemned—the latter because it chills the parts and masks symptoms of a possible complication, and the former because it lowers the vitality of the soft parts and produces disagreeable hyperaesthesia of the external ear. The trouble if deep seated, within the mastoid cells or antrum is not benefited by local measures, and often made worse by inviting more rapid and serious invasion to the point of least resistance—the tegmen tympani and meninges. Should there still remain mastoid pain or tenderness, especially on deep pressure, the question of operation may be considered, and if these symptoms increase or there is bulging of the posterior superior wall of the canal, with a moderate temperature and evidence of septic absorption as shown by blood count and general appearance of the patient, a mastoid operation had better be done. When reasonably sure of the invasion of the deeper structures of the mastoid process and antrum by the suppurative process, the health, hearing and life of the patient are rendered safer by an early operation. It is better to operate a day early than an hour late, and the most conservative and safest thing to do is to give free and unobstructed drainage to pus and remove all pyogenic foci and necrosed bone.

In these early cases of mastoiditis endeavor to get out every cell and then sew up the wound with the exception of a place at the bottom for a small rubber drainage tube with side perforations throughout its entire length. This is inserted and allowed to remain for at least three days. The periosteum being retained with the flaps, these lie down in the excavated area, new osteoblasts forming from the periosteal surfaces, and the period of healing is diminished by more than half. If suppuration should return subsequently, it is easy enough to re-open the wound from the bottom. This is done without pain as the nerves are not grown from one flap to another in less than ten days. In the very few acute cases I have had, this method has been satisfactory—it is safe enough and materially shortens the after-treatment without risk to the patient. This might be called a modified blood clot dressing, although not strictly the blood clot dressing as advocated by the devotees of that method.

If the acute suppuration continues and is abundant in amount, even in absence of mastoid pain or tenderness, it is evident that more or less of the mastoid area must be involved, and after waiting ten days or two weeks without any marked diminution of the discharge, I think it safer to open the mastoid cells in order to conserve the hearing and avoid the risk of an extension of a process, the extent and nature of which we have no other means of judging. In several instances, in cases which at no time complained of any mastoid pains or tenderness, after waiting for some days, with a profuse discharge in spite of daily treatment, I have opened the mastoid and found the entire mastoid cavity disorganized.

With reference to the present status of treatment of chronic suppuration of the middle ear, I believe in many cases, if we would exercise the same degree of attention and care in the cleansing, curetting and antiseptic treatment of the cases we have not operated upon as we do to the after-treatment of the case on which you have done a radical operation, we will find that quite a number of the cases will be cured, or at least cease to discharge in as short, if not shorter time than after the performance of the radical operation, provided the floor of the antrum is not below the floor of the aditus, and the mastoid cells are not already involved. This latter proviso does not often exist, hence we are but putting off the evil day, and jeopardizing the hearing and life of our patient by delay in giving the relief and safety afforded only by the radical op-

eration. The improvement in the technique of the radical operation has so shortened the after treatment—the use of the Kerrisons forceps for removing the superior wall of the canal, the use of the rongeurs instead of the chisel, the closing of the wound posteriorly and the use of the drainage tube instead of the gauze packing, has revolutionized the after treatment and reduced the danger of injury to the facial nerve, the dura and lateral sinus to a minimum.

In many cases of chronic suppuration the question of ossiculectomy has to be considered. There is undoubtedly much good accomplished by removing the necrosed remnants of the ossicles in selected cases, but the usefulness of this procedure is limited, and when I do not obtain permission to do the radical operation this operation is sometimes consented to. Of the twenty-four cases of ossiculectomy reported by me in 1901, five have since been operated upon in the radical manner with perfect results, four still have recurrent discharge of pus, and the remaining fifteen so far as I have heard are still relieved of the trouble.

While there are limitations to the radical operation, and it is correctly spoken of as one of the most delicate and difficult in surgery in that the facial nerve has to be considered as well as the semi-circular canals; that it is desirable to save the stapes; that one is not very far off from the cranial cavity; at the same time we are to remember that suppuration and necroses do not consider these points and the march of infective destruction is toward the points of least resistance, the cranial cavity and general circulation. In my own cases there has never been more than a temporary involvement of the facial nerve, the hearing has never been made worse, but in 20 per cent. of the cases there is a slight improvement, and no injury has been done the semi-circular canals or stapes. In a word no operation has been followed by the gratifying results to both patient and operator as has the Stacke-Swartz operation for chronic suppuration of the middle ear.

We have been subjected to the keen mortification of operating on a suspected temporo-sphenoidal or cerebellar abscess without having our diagnosis confirmed by the findings, and yet all the antemortem symptoms indicating the diagnosis were sustained by neurologists and general surgeons of ability, whereas the autopsy revealed the lesion to be located in another part of the brain (S. Mac Cuen Smith). This simply serves to emphasize the one cardinal point, namely, in dealing with all classes and varieties of pus

formation and necrotic changes occurring within the temporal, our chief aim should be to eradicate the disease by whatever means may be necessary, before any serious complications have time to develop.

The discharge of pus from any part of the ear must be regarded as a menace to the hearing, health and life of the individual so afflicted; this truism is not in any sense modified by the knowledge of the fact that cases have been observed to exist for years without the development of any serious complications.

THE EARLY DIAGNOSIS AND TREATMENT OF PULMONARY TUBERCULOSIS.

BY WALTER F. BOGGESS, LOUISVILLE.

(Concluded from January Issue.)

tubercular patients is the diet requiring the least digestive powers and yet richest in nutrition, particularly the albumenoids. Consequently, our principal diet is milk and raw eggs. It is best, in these cases, to start with a small quantity of both articles, say three eggs a day and beaten up in a quart of milk, increasing this diet one egg and one-half pint of milk every third day, watching the patient's digestion and stopping the milk and eggs, or cutting down the quantity, if there is positive evidence that it is not being digested. This can very readily, in a majority of patients, be increased until they are taking as much as 12 to 15 eggs and half a gallon of rich milk each day. You can add to this egg and milk any flavoring that the patient may desire, vanilla, nutmeg, cinnamon, a little chocolate, or anything that will make it more palatable. Occasionally you will find patients who cannot take sweet milk. In such cases we can substitute buttermilk with a little sweet cream added; or, in our wealthier patients, we can substitute koumyss and, as our patient's digestion improves, you can add to this juicy steaks—a pound of good rich steak, rare done, once a day, or finely powdered meat, or the freshly expressed meat juice. Some have advised a raw meat diet. The addition of olive oil to this diet list is an excellent one to those who can take it. To get beneficial effect from olive oil you must gradually increase the dose until the patient is taking from 6 to 8 ounces a day. In many cases the digestion is not at all disturbed and, in addition to the milk and egg diet, they can take an ordinary diet. It is wonderful how rapidly the appetite and

digestion improve upon the fresh air treatment, especially in cases that we have to treat in the cities.

You must be extremely careful in the administration of drugs that the medicines do not disturb the stomach, for perfect digestion and assimilation are of much greater value than any medicinal treatment that you can give.

A very excellent axiom, given by Hare, is this: "Avoidance of the use of drugs, with the idea that they can cure the disease, for he who tries to cure pulmonary tuberculosis by drugs does not know the morbid anatomy of the malady. The employment of drugs should be simply to control or modify symptoms which are severe enough to demand attention."

MEDICINAL TREATMENT.

No medicinal agent has any specific action upon tuberculous processes. If we use drugs at all they are used for their specific action upon the general nutrition, lessening nutritive toxemias, assisting nutritive processes and increasing physiological resistance. The remedies we ordinarily use in these cases, which are supposed to have some specific action upon the nutrition, are creosote and its numerous derivatives, arsenic, particularly cacodylate of soda, hypophosphites, glycerophosphates, iron and cod liver oil. I have, years ago, about abandoned the use of cod liver oil. If I use it at all I give it in one dose of the pure oil each day, stirred in half a glass of ice water.

THE TREATMENT OF SUBJECTIVE SYMPTOMS.

The symptom that is most prominent, even in the incipient stage, is that of cough; a symptom of such prominence and so much discomfort to our patient, that the physician oftentimes allows himself to be drawn into the use of all kinds of cough syrups and cough mixtures that do no good, but absolute harm by disturbing the stomach. Very few remedies should be given for this symptom. A sixteenth or a twenty-fourth of a grain of heroin every two or three hours, or a quarter to a half grain of codeia every three or four hours are about all the remedies which should be used other than that of heroin combined with hydriodic acid. My favorite prescription in these cases of dry hacking cough is to give one-sixteenth or one-twelfth of a grain of heroin with two drachms of syrup of hydriodic acid, well diluted, every three or four hours. Mild counter-irritants, or hot applications over the chest will sometimes assist in relieving the cough. Ten per cent. of iodine in petrogen or vasogen, used externally, I have oftentimes found of service. The

early morning cough is frequently relieved by drinking a glass of hot milk, or a cup of hot water.

The next symptom of prominence, requiring special treatment, is that of fever. The fever, unless extremely high, should not require any special treatment other than absolute rest in the open air, day and night. Fever does not contra-indicate an out-door life, but it is well for patients with a temperature above 101 to be at rest. Under no condition of fever should quinine be used for its anti-pyretic powers. The coal-tar derivatives should never be used for the diminished vital resistance produces profuse sweats and increased anemia. The patient may be sponged with tepid water and alcohol, or given a bath with very hot water and an alcoholic rub afterward, only being careful that the temperature does not break rapidly and become sub-normal.

Another symptom that demands attention is that of sweating. This we do not see very often in the incipient stage. The best remedy for the relief of night sweats in these cases is atropin, doses from 1-120 to 1-60 of a grain, camphoric acid in a possible dose of 15 to 20 grains, two or three hours before the time of sweating, or large doses of aromatic sulphuric acid, well diluted.

HEMOPTYSIS.

In these cases it is necessary for you to consider each case individually, and much of your treatment will depend upon your individual as well as the location and cause of hemorrhages.

When a patient has had hemorrhage from the lungs, our first endeavor is to put him to bed and produce a condition of mental serenity and vascular tranquility, for there is nothing that alarms or disturbs a patient so much as hemorrhage. This can be best done by a hypodermic of morphin and atropin, and purging the patient well. The diet should be light and unstimulating, and the patient should be kept perfectly quiet. When arterial tension is low, pulse fast and weak, I use, in such cases, 10 or 15 drops of a one to two-thousand solution of adrenalin chloride hypodermically every hour for three or four hours until all the hemorrhage ceases; still, all the time keeping the patient in the open.

Now, as to the use of serums; we are all familiar with the prevailing disappointment in the last decade in the use of serums. While many of the sanatoria have written papers in which they have highly praised the employment of tuberculin in its various forms, I have never obtained any positive results from the use of any of the serums, or from any form of tuberculin.

This paper gives you nothing new, possibly nothing original, and yet it has been the author's endeavor to handle the subject in its practical and every-day aspect with the hope that we will all be a little more careful in our diagnostic methods in the early stages, and a little more insistent upon the absolute obedience of the patient to our rules as to the mode and manner of living.

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DISCUSSION.

Dr. Dunning Wilson, Louisville: Dr. Boggess is so decidedly orthodox in his views, and agrees so thoroughly with my own views, that my discussion probably will be nothing more or less than a repetition of what he said. I was very much pleased to hear what he had to say about this subject and to learn that he is one of the men who can be depended on to take decided views on matters which are being thrashed out so carefully.

Touching the matter of early diagnosis of tuberculosis, I think that it is necessary for us to understand our nomenclature somewhat better than we do. Early diagnosis, to me, means one thing; to another man it means something else. If we accept early diagnosis as meaning the curable stage, then an early diagnosis may be made in the advanced stages of the disease because I have seen such cases where the disease was arrested. For that reason I think that early diagnosis is a term that should be limited to that condition which is of such a small extent that the patient does not suspect the presence of the disease.

What is the first thing which would direct our attention to the presence of a pulmonary tuberculosis? The patients whom I have been fortunate enough to see in the early stages of the disease have never referred to the lung in any way; in fact, as Dr. Boggess said, it was their stomach that was causing all the trouble. Or they may be feeling merely out of sorts. On stripping the patient, what do you say? As Dr. Boggess said, on inspection, you will note that there is a lack of movement on the other side. Auscultation will elicit the fact that the disease is localized in a very small area. There may not be prolonged respiration or expiration.

With what other conditions can this be confused? I do not believe that there are many other conditions with which these can be confused, provided we have a fairly good history. The only other condition with which it might be confused is actinomycosis, and, probably, syphilis of the lung, and both these conditions can be excluded easily.

I do not believe that the early diagnosis of tuberculosis can be made positively by the auscultatory signs alone. In arriving at a diagnosis

we should take into consideration the composite picture. We should ascertain whether any member of the patient's family has ever come in contact with any other cases of tuberculosis. The malaise and lassitude of the patient may be plain. The tongue may be coated and the patient may complain of some stomach trouble. And last, but by no means least, we have the clinical thermometer as a great aid in making up the clinical picture. If the excursions of the thermometer are half a degree above normal any time during the day extending over a period of several hours or days, I think you can be positive that the case is one of early tuberculosis; that is, considering also the auscultatory signs.

In certain cases coming to us where we are examining for heart trouble or some other affection, what would lead us to look for tuberculosis on inspection? I think that tenia versicolor is suspicious. It is a peculiar fact that tuberculosis cases show a less resistance of the skin to disease than is ordinarily found in other conditions. I know of several cases of tuberculosis where tenia versicolor accompanied the disease. It is also well to examine the patient thoroughly and get a composite picture in cases of herpes zoster. Please do not mistake me. I do not mean that tenia versicolor can not exist without tuberculosis, but its presence should arouse suspicion.

Another thing is dilatation or inequality of the pupils. That should be looked into carefully when present in any case.

As to the matter of exposure followed by the development of tuberculosis, I question that occurrence very seriously. At least, I would like to know what Dr. Boggess meant by exposure. I do not believe that he means exposure to the air, because he says that air cures the disease. I think he means exposure to contagion. A man does not develop tuberculosis merely because he has been thrown out into the open air. The thermic senses take care of the changes in temperature, and exposure would not have any influence whatsoever, in my opinion, in developing tuberculosis.

Conditions which may be confounded oftentimes with tuberculosis in its early stages, such as malaria and typhoid fever, which he mentioned, may present great difficulties in making a diagnosis. I have in mind several cases in which the symptoms simulated typhoid fever very closely until an examination was made of the lungs and of the sputum, when tuberculosis was diagnosticated.

As Dr. Boggess said, the first requisite in the treatment of tuberculosis is perfect and complete control of the patient. Without having such control and insisting on the patient obeying implicitly the rules laid down for a long

period of time we might just as well not take up the treatment at all.

It was certainly a great pleasure to hear the Doctor speak in favor of every climate and so emphatically against any particular climate. That is the only sensible view to take of the matter. In reading the life of Dr. Drake I was particularly struck with the fact that he wrote about the wonderful climate of the Ohio Valley, and he mentioned particularly that Ohio and Kentucky were to be recommended for the cure of tuberculosis. I have heard it said in Kentucky that this is a bad climate. Our meteorological survey will tell you that we have had the same climate in Kentucky for the past one hundred years. One trouble with us is that we have always been looking for the promised land just beyond the horizon, and consequently it has passed from Kentucky to California and to Honolulu, where Dr. Louis Stevenson went to live.

About the length of the treatment. I think we make a great mistake when we tell our patients that they will get well quickly. The sanatorium men have made a mistake when they promised those patients that they will be well in three months or six months. I think that in the early stages of the disease at least a year, or even more, is required to cure the disease.

Dr. Arch Dixon: I wish to confirm almost everything that Dr. Boggess said. The fact that tuberculosis mimics so many diseases in its early stages make it exceedingly difficult to diagnose the disease. The patient complains of a feeling of malaise. He has lost some weight. He may have a cough, and an increased pulse rate, and if you will take his temperature at certain times—and in these cases I make it a rule to take the temperature every two or three hours—you will find that he has a sub-normal temperature in the morning and a slight rise in the afternoon.

You may think that he has typhoid fever or that he has all the symptoms of malaria. I have had these cases and you have had them, but, gentlemen, do not be satisfied with your diagnosis. Look carefully for tuberculosis. Go into the history of the case thoroughly. Find out whether the patient has lived in the same room or in the same house during the year past in which there lived or died one who had had tuberculosis. Strip your patient down to the waist and examine carefully. Do not examine the chest through the clothing, but remove the latter. No matter whether he has a fully developed chest or whether he has a tubercular chest, long and flat and narrow antero-posteriorly, go over the patient carefully. Take his pulse rate and his temperature at certain times.

Most important of all procedures is auscultation.

In the early stages of tuberculosis percussion does not amount to anything. By auscultation you get low breath sounds over the affected area; you get a prolonged expiratory murmur; perhaps a slightly increased vocal fremitus and in addition to that a disturbed temperature.

These cases are extremely suspicious. Trudeau says that the average medical man's idea of pulmonary tuberculosis only relates to the disease after the rational and physical signs have become well marked. It does not affect him at all until the physical signs have become so patent that he can not overlook them. We do not take the pains with these cases that we should. It is not one examination that will make the diagnosis, but repeated examinations, comparing the results of one examination with those of another. These things which, as a rule, are generally overlooked by the general practitioner are most important in diagnosing a case of early tuberculosis. And I believe that cases that are diagnosed early, in the prebacillary stage can be cured. We do not need to rely on the microscope to give us the diagnosis.

Dr. Joseph Walsh, Philadelphia, Pa.: If I were to judge from the enthusiasm of the lay people I have met, from the enthusiasm of the physicians, and from the paper of Dr. Boggess, I certainly would think that I was right in a hot-bed of sanatoria and sanatorium men. It certainly has been a great pleasure to hear this paper and the discussions of the different men. I am sure that I have nothing new to add, and anything that I can say about the early diagnosis and the treatment of tuberculosis will be only a repetition of what has been said already.

In regard to the early diagnosis of tuberculosis I would like to say that a local lesion in the lungs may be caused by five different conditions; tuberculosis, syphilis, actinomycosis, glanders and carcinoma. Carcinoma is practically excluded at once on account of the age of the patient, the sex and the general standing of the individual. As far as actinomycosis and glanders are concerned I know of no treatment other than the modern treatment of tuberculosis.

The diagnosis of a local lesion in the lung is not, as a rule difficult. Distributed moist rales all over both lungs usually indicate a general infection by a pyogenic organism, but rales localized in one or both apices are absolutely diagnostic of tuberculosis. Such rales are often found on normal breathing, again only on deep breathing and sometimes only on coughing.

Rales are not, however, the earliest physical signs. Rales occur only when there is a certain amount of breaking down of tissue. This may occur when the lesion is very small or it may not occur until the lesion is of large size. The two most common physical signs of early pulmonary tuberculosis are prolongation of expir-

ation and a slight impairment in the percussion note. I can readily conceive that a slight prolongation of expiration and a slight impairment in the percussion note, without any other symptoms whatsoever, will make any one hesitate about making a diagnosis of tuberculosis. Still in the majority of cases, I might say in practically all of the cases, there are so many other symptoms aiding in the diagnosis that it readily becomes certain. The trouble is that the majority of physicians are not willing to give due weight to symptoms that are evident and plain to them.

A physician, for instance, is treating a case of measles, and five or six days after the patient has become ill he is called to see a second child in the family showing a rash almost typical of scarlet fever. Is he going to diagnose scarlet fever? Not with the other child in the house ill with measles, and as a rule he is right in his position.

The same thing ought to be true of tuberculosis. When a child in the family or any member of the family has hip-joint disease or enlarged cervical glands, and a brother or sister of that patient comes with signs of tuberculosis it is not well to wait for too many signs to appear. These children were associated under the same conditions all their lives. One child developed the contagion in the joint or in the glands; the other child exposed to the same influences developed the disease in the lungs. It is merely a matter of the *locus minoris resistentiae*. When one member of a family has tuberculosis, no matter where, exclude first tuberculosis when any other member of the family becomes ill.

Do not be satisfied too easily with the family history as it is stated by the patient. I have had at least two or three cases where the patient stated that the father died of smallpox, and yet further questioning brought to light a tuberculosis existing before the smallpox developed. Often we are told that the mother died in confinement. We ask how long after and are told six months. We must remember that pregnancy has a retarding influence on tuberculosis, but that labor usually causes a breaking down. When a man tells you that his mother died six months after confinement the case must be gone into very carefully.

A brother, for instance, is often said to have died as the result of an accident. He was run over by a wagon or fell on the ice but he did not die until two years afterward. Further questioning reveals the development of tuberculosis in the meantime. With tuberculosis in a family, it is difficult for other members of the family to escape an implantation. That implantation may occur at any time, and it is incumbent on you to watch for developments.

Dr. Dudley S. Reynolds, Louisville: I listened

attentively to the essay and to the discussion, but I heard no mention made of the correlation between the pulse and the respiratory movement, the temperature and the condition of the skin. I consider that, in the early diagnosis of pulmonary tuberculosis, auscultation and percussion are not to be thought of at all. They are valuable only after extensive structural changes have occurred. In the early stages of infection of the pulmonary structure disturbances in the respiratory movement, changes of temperature, disturbances in the pulse rate and dryness of the skin are of first importance. Family history is worth nothing, and the patient's history is worthless. Why, if it is so difficult for the skilled and expert physician to make a diagnosis, would you expect a layman suffering with the disease, or who had been exposed to the contagion, to make a diagnosis for you? He might not know of his exposure to the contagion.

I think that these are matters that should be considered. I do not think the younger members of the profession should be led to believe that in auscultation and percussion alone, are to be found the signs of pulmonary tuberculosis in its earliest stages.

One of the speakers referred to the prebacillary stage. That is impossible if the bacillus causes the disease. The prebacillary stage must necessarily be the state of health before the infection. There can be no other definition of that term.

Dr. B. J. O'Connor, Louisville: It is certainly time that we attempt to reach the stage where we can make a diagnosis of tuberculosis in its early stages. It is undoubtedly wrong to wait to make a diagnosis until we can find the bacilli in the sputum. I do not wish to repeat what has been said already, but I want to emphasize one point brought out by Dr. Wilson, and that is, that a half a degree of elevation of the temperature, even when there are no other symptoms, except the cough, elevation of the temperature is highly suspicious.

In cases of pure infection with the tubercle bacillus you rarely get more than one degree of elevation of temperature, and, no doubt, there are many cases of pulmonary tuberculosis that are unmixing in character. They may start primarily as an attack of bronchitis, but this will subside and leave in its wake a pure infection with the tubercle bacillus.

Another point in the diagnosis is prolonged expiration. I believe that this is the first physical sign we get in pulmonary tuberculosis, at least, it is so regarded. Of course, you are quite likely to get every variety of breathing in tuberculosis, but this is the first variety to attract your attention and to suggest tuberculosis. Compare the two sides of the chest very carefully. This sign can be detected much more easily than

slight variations in fremitus or in percussion. The trio of symptoms, cough, slight elevation of temperature and prolonged expiration, especially if it is very distinct over either apex, should be enough to make a diagnosis that is sufficient to inaugurate antitubercular treatment.

Dr. Wm. Bailey, Louisville: I want to speak very briefly in regard to the early diagnosis. There is one thing that doctors should do, especially the younger men, and that is prepare ourselves to become more skilled diagnosticians. I doubt that some of us have any right to enter objections when we fail to recognize tuberculosis because we have not acquired the skill that is necessary to make a correct diagnosis, and many of us can become much more acute in our observations by close attention and work.

In regard to differentiation. Oftentimes we find cases that have been treated for other troubles that proved to be tuberculosis. Take for instance, malarial fever. How common it is in our part of the country where malaria prevails to such an extent that we find after two or three or even four months of treatment with quinine, arsenic, etc., that we have failed to arrest the fever, and then we discover that the case is one of tuberculosis. Why do we not give attention to the diagnosis earlier, especially when we can have absolute proof of the presence of malaria if only we will go after it? Why do we go right on treating a case for months with quinine, arsenic and strychnine when by making observations at suitable times during the paroxysm we can absolutely exclude malaria from the case. We fail to find the organism that causes malaria, and, besides, we have a history which, because of its very indefiniteness and uncertainty, ought to lead us to treat the case as one of tuberculosis on suspicion. Make your diagnosis by exclusion and you are bound to come to believe that it is one of tuberculosis. At any rate, it should be regarded as a case of tuberculosis until it is proven to be otherwise.

It has seldom been my privilege to hear a paper that I agreed with so fully as Dr. Boggess'. He has expressed my sentiments better than I can express them myself. In some things, however, I might differ with him and with some of the gentlemen who have discussed the paper. One of these I want to allude to particularly because of my thorough convictions in regard to it, and that is, that Kentucky is a good place to treat tuberculosis, as good as any other place. I do not believe it. We send our patients West to be cured. If Kentucky is as good as any other place, why do you not let these patients come back? You invariably advise them to stay where they get their health.

When visiting Denver on two or three occasions I found that 75 per cent. of the physicians there were tuberculous on going there, and they

remained there after they were cured. Their home has been made there and you can not entice them away because of their conviction that it would mean a return of the disease. My observation has been that where men have been improved markedly in that climate that when they come back to Louisville they are tuberculous again in a year's time and they never get the same benefits from treatment afterward. I think that conditions that are favorable exist in some climates that are absent in others.

We need sanatoria here, however, for those who can not get away. There are thousands of persons who would be made worse if we sent them away, but if ever I should become the victim of tuberculosis I would not remain in Kentucky. A patient should be sent away in comfort and he should be able to take care of himself. If possible, he should engage in some light occupation which will interest and entertain him, because often the yearning for friends, home and society is very detrimental to the patient's welfare. Going into such a climate as that we do not find germs to the same extent as we find in our own. Consequently, the danger of a mixed infection, which is so serious a matter in tuberculosis, is avoided. You do much to prolong life and the patient has a better chance to recover than he has at home, so that I am inclined to think that we can tell our patients that that is the best climate for them to recover in. We can not say that this is the best climate. For my part I do not believe that I prefer an elevated climate.

Dr. Jacob Glahn, Owensboro: I think that the time is coming when we will have as much need of the barometer as we have for the thermometer, especially in the treatment of tuberculosis. Both Dr. Reynolds and Dr. Bailey stated truisms which we must solve. Dr. Reynolds said that we did not say enough about the pulse, but he did not go any further. Dr. Bailey said that there must be a reason why men improve in a higher altitude than that of Kentucky. The barometer will give you the solution. It is just as reasonable to study the air we breathe as it is to determine the patient's temperature, or the temperature he lives in.

But will you tell me that a normal healthy man will be infected by germs? If that is true, then I have lived thirty odd years longer than I ought to have lived. When I was a boy I laid for thirty-three days in a German hospital right amongst tuberculosis patients without contracting the disease. Gentlemen, the cause of consumption lies deeper than just a mere infection. The soil must be there on which the germ can thrive.

You spoke of the pulse. What is the pulse? What makes it go? You also spoke of a reflex action of the nervous system. What makes that go? Cell action makes it go. Every one who lives

on the earth's surface is subjected to a certain atmospheric pressure which becomes lighter the higher you go up. That relieves the cell arrangement in every organ of the body; assimilation will go on better.

Sanatoriums can be established here in Kentucky as well as anywhere else because the out-door air is all right; but what should be the temperature? Is it a moist, cold temperature, or dry, warm temperature? It must be a dry, reasonably warm temperature. Cold contracts, (congeals) and heat sets free force. That must be taken into account by every medical scientist.

Dr. Boggess, Closing the Discussion: I am very grateful for the kind words said about my paper. In regard to Dr. Wilson mentioning the term exposure, I had no reference to exposure to air or climate, but simply to exposure to infection.

I tried to bring out in my paper very fully the fact that the mere use of physical signs is only an aid in making a diagnosis. We must consider not only the objective symptoms, but also the subjective symptoms. No man can make a positive diagnosis of tuberculosis in the early stages of the disease without other assistance. They are only confirmatory of other conditions.

I tried also to refer to the correlation between the pulse, the temperature and the skin. Increased rapidity of pulse and of respiration, and a slight elevation of the temperature are often the first signs that will lead us to suspect any trouble in the lungs.

I fully agree with Dr. Bailey that there are certain climates that are more suitable for some individuals than are other climates, particularly the climate of Kentucky. That climate is the best which fulfills the requirements I mentioned; fresh air, equable temperature and an abundance of sunshine, so that the patient can live out of doors all the time. If the patient can go there and live contentedly, it is undoubtedly the best climate for him; better than this climate. But not more than one or two per cent. of our patients are able to go away and not suffer from homesickness, so that we are confronted with the question, Can we cure our patients at home? Perhaps we can not do it so well as we can in a more equable climate, but we can do it, and we ought to try it.

I fully agree with Dr. Glahn in regard to the soil. There is one thing necessary and only one thing for the development of tuberculosis in every individual and that is a lowered vitality, a lowered resisting power. The tubercle bacillus will not thrive on any tissue that is full of vitality and resistance. Anything that lowers this vitality and resistance makes us candidates for infection. Sometimes this condition is an hereditary one, or our early life leads up to it. Of-

tentimes it is acquired by exposure, dissipation and privation, but lowered vitality is the one thing necessary in every individual for the development of tuberculosis.

Dr. Reynolds referred to the prebacillary stage. By this is meant the making the diagnosis long before the tubercle bacilli appear in the sputum, although they are, of course, present in the lung. After they appear in the sputum the case is so far advanced that the merest tyro can make a positive diagnosis, as a rule.

THE INSURANCE FEE

By A. T. McCORMACK, M. D.

Secretary of the Kentucky State Medical Association, Bowling Green, Ky.

The following is taken from the Insurance Department of the American Medical Journal of Jan. 5th, and will be of interest to the physicians of Kentucky:

THE BEGINNING OF THE EXAMINER'S FEE QUESTION IN KENTUCKY.

The fight to prevent the lowering of the already moderate fee for making examinations for life insurance companies was begun—in Kentucky, at least—by the Muldraugh's Hill Life Insurance Examiners' Association at about the same time—probably as a result—of the outrageous reduction of fees by the New York Life in about 1896. This association was entirely independent of any other medical organization, but held its meetings on the same day with the session of the Muldraugh's Hill Medical Society. It included in its membership every doctor in the territory who was eligible to become a life insurance examiner. Together they studied how to become better and more thorough examiners, and every member voluntarily pledged himself that under no circumstances would he accept a less fee for any complete examination than \$5. Every reputable doctor in these five or six counties was soon a member of the new organization.

Now for results. The New York Life agents for the past ten years have written more insurance than those of any company in Kentucky, but they have not written a policy nor had an examination made in the Muldraugh's Hill district. Other companies have written many thousands of dollars' worth of policies there. The Northwestern of Milwaukee and the Mutual Benefit of Newark, both always \$5 companies, have two of their best producing agents there.

If this could be done by an active band of earnest men in five counties in Kentucky, why can it not be extended to every county in the United States? Let our 2,500 county so-

cieties act as a unit, and the insurance men who have been coining millions out of the common people largely through the labors of our profession will be brought to a realization of our value. Safeguards have been thrown about other departments by law. If we are protected we must protect ourselves. "United we stand, divided we fall."

THE PRESENT STATUS IN KENTUCKY.

On October 10, last, strong resolutions declaring that the minimum fee for life-insurance examinations in Kentucky on and after Jan. 1, 1907, should be \$5, and explaining why, were passed unanimously by the State Medical Association. Within ten days this resolution was mailed to every practicing physician in the State, enclosed with a letter asking for his support, and an addressed postal for his reply. Up to this time 3,662 of the 4,126 legally registered physicians of the State have personally replied that they would make no insurance examinations for any company which employs incompetent examiners or which pays less than \$5 for each complete examination. Of the less than 500 who have not replied directly, half at least have signed local agreements to the same effect in their own county. In 53 of our 119 counties every doctor in the county has signed a similar resolution at a formal meeting of the profession of his county; and in at least thirty other counties every doctor has signed the State agreement. Owing to the bad roads and winter weather it has been impossible yet to get formal meetings within the few remaining counties, but we feel sure that within six weeks every doctor in Kentucky, not receiving a salary from an insurance company, will refuse to make examinations for less than the minimum fee of \$5 established by the State Association.

The officers and members of our State Association are acting under the injunction of the preamble of our constitution, "to guard and foster the material interests of the physicians of the State." The House of Delegates, in considering the insurance fee resolutions, acted under the express provision of Chapter IV, Section 5, of the by-laws, which says: "It (the House of Delegates) shall consider and advise as to the material interests of the profession, and of the public, in these important matters wherein it is dependent on the profession." Our resolutions and the report of the national committee all expressly recommend that acceptance of them shall not be made a test of membership. Many county societies, and some State associations, have declared that any doctor continuing to examine for the companies which pay less than the established fee is guilty of dishonor-

able conduct. This is clearly within their rights, and surely the officers of the great insurance companies which have reduced the fee, who have been shown recreant to their trusts, are estopped from quoting our own rules to prevent us from protecting ourselves and our profession from their ravages.

Our State Association was familiar with the efforts of our national committee to effect a compromise on terms which were most favorable to the insurance companies, and it was their natural indignation at the rejection of a compromise, which many of them disapproved, by the great insurance trust, that caused their action and that has caused its unanimous endorsement. It was explained to our House of Delegates as, at this time, we were engaged in active warfare with the nostrum interests, and in perfecting our organization along other lines, and, at the same time, knowing that the insurance magnates and their employees were, or ought to be, busy correcting the abuses Mr. Hughes and his committee had discovered, our national committee felt that it was wise and would be acceptable to both interests to offer a compromise, probably exactly acceptable to neither, but which might afford a common ground for a present agreement, and which hereafter might be modified if necessary. The following was the original offer of our committee:

PROPOSITIONS OF INSURANCE COMPANIES.

1. If desired, through its councilor system, reaching every district in the United States, and embracing the leading members of the profession in 2,400 of the more important and populous of the 2,830 counties, the American Medical Association will assist the insurance companies in selecting only competent and morally responsible men as medical examiners.

2. County and other societies and post-graduate and other schools will be utilized for special courses in life-insurance work, involving both scientific and moral responsibility in medical examinations.

3. Fees for examinations will be restored to former standards after Jan. 1, 1907 (and that after that date medical examiners assume the duties and responsibilities, in so far as may be possible, heretofore performed by inspectors, without further compensation).

As every insurance company in existence now requires a report on the moral hazard of the risk, it was felt that the third clause added no duties to the examiners, but that it would relieve the insurance companies of a great and useless expense, *which is charged in their annual reports to "medical examinations."*

At the fall conference, mentioned in the

committee's report, it went even further and offered to accept a fee of \$3 for examinations of \$1,000 or less, with a graded fee of \$5 and upward for all examinations involving over \$1,000. This was proposed by Dr. J. N. McCormack to meet and to test the insistent plea of the companies, which he did not believe was warranted, that the cut in fees for the examinations for small policies was an absolute necessity under the recent New York laws, as well as to ascertain their willingness to make any concessions in the interest of peace. This offer was rejected just as was the former one, these companies evidently acting in concert themselves, but without even the pretense of consistency, demanding that they should be left to deal only with the helpless individual examiner. The action of the Manhattan Insurance Company, also of New York (and of many other great companies of other States doing business there), in declining to reduce its fees, and announcing that it was not made necessary by the recent legislation in that State, only confirms the impression held by those best informed that this law was only taken advantage of to carry out a long concerted plan to do this injustice to our profession, heretofore defenseless because unorganized, and fully justifies our committee in smoking them out by the offer of a compromise more than fair to them.

All of these facts were presented to our State Medical Association, at the Owensboro meeting, and it was largely the rejection of the more than fair compromise offer by the insurance trust that caused so much righteous indignation among our members, and made it easy for us to secure the unanimous and enthusiastic support of the profession in almost every county in Kentucky.

STATE BOARD OF HEALTH.

A COURSE OF MEDICAL ECONOMICS.

For the reasons given below, it was suggested in the House of Delegates of the American Medical Association, at its Boston session in June, 1906, that each college be requested to consider the establishing of a department in Medical Economics, the chair to be filled by a carefully selected teacher who has himself been successful in the special lines to which the work relates. In order to secure recognition by the State Board of Health of Kentucky every medical college must now establish such a department. The subjects to be included in this department, it was suggested, should be (1) a business course, (2) a course in medical ethics and (3) a course on organization. A course in

the history of medicine might also be included.

1. *A Business Course.*—This course is intended to lay stress upon: (a) Importance of probity and honor in all transactions, particularly in reference to those as witnesses, as insurance or pension examiners, in the issuance of health certificates, etc. (b) The fundamental principles underlying a physician's compensation, as well as the dangers both to the profession and to the public from inadequate support (proper compensation most important, since it enables the physician to keep up with the advances in medicine and be better equipped to meet the responsibilities of his life-saving work; (c) The importance of a fair, but purely advisory schedule of fees in each community. (d) The justice of double fees after 8 p. m. that time may be had for study, society work and family and social life. (e) Necessity of modern methods of medical bookkeeping and frequent, regular, and systematic collections. (f) The duty and privilege of cheerful, gratuitous service to the worthy poor, but that such service to the clergy and other well-to-do classes should cease at once and forever (this last should be explained by the statement that osteopathy and nearly every other fad have had their chief support from those whom physicians have served without compensation). (g) The evils and dangers of lodge and contract practice. (h) The downright dishonesty of a division of fees with surgeons and druggists, unless it be with the full knowledge of the payer. (i) Value both to the physicians and to the public of co-operation between physicians instead of the old spirit of competition. In brief, this course should give each student complete instruction in regard to the financial side of his practice.

2. *A Course in Ethics.*—This course should begin with the inculcation of the broad spirit of altruism, which should be a part of the warp and woof of every true physician. It should be made clear that doctors exist primarily because there is sickness to be prevented and afflicted people to be relieved, and only secondarily for their own benefit. They should be taught that, instead of the profession being overcrowded, there are not enough physicians in this country to do the work if every sick person received the kind of scientific examination and treatment to which he or she is entitled. The principles of ethics, embodying the accumulated advice and wisdom of the ages, should be read section by section and discussed and explained so that its teachings can be adapted to the needs of their daily lives, and made both chart and compass to them, instead of the bone of contention

and fruitful cause of trouble which has been its chief function in the past. They should be taught that no doctor has ever profited permanently by unprofessional or dishonest conduct, and that the widespread public disgrace under which the profession is laboring to-day, handicapping us individually and as a whole, in both reputation and purse, is the result of petty, senseless, causeless quarrels between physicians competing for the same practice, which by joint study and increased competency would be found so multiplied that both or all of them could hardly give it attention. In contrast with all of this should be held up the reasonable and desirable possibilities open to a united profession in every county, state and the nation, working intelligently for the promotion of its own and the public welfare.

3. *A Course on Organization.*—This course embraces the entire field of medical sociology, including business and ethics, but should be restricted more particularly to the methods best adapted to secure higher standards of competency and more practical co-operation between physicians already in practice, and who have not had the advantages of such a course as is here advocated, and with whom the new graduates will at once be brought in contact. The history of medical organization in this and other countries, and the present disorganized and demoralized condition of medical affairs in this country, traceable largely to a failure of the schools to teach better methods in the past, should be outlined. The plan as now going into operation based upon the county society system, with the state and national associations for fostering and acting as connecting and intercommunicating links and agencies between these, should be explained clearly. It should be dwelt upon that the county society, or subdivision of it, as may be, meeting weekly or oftener from joint study, social intercourse, business adjustments and the solution of all other problems inseparable from the evolution of a great profession into the usefulness possible to it under intelligent direction, is of the first importance, and membership in it the first duty of the graduate after his location is selected. The proper relations between the county, State and national organizations, and especially the dependence of the entire system and of the individual doctor upon the permanent efficiency of the county societies, should be thoroughly presented so that the students know and appreciate what it means to each of them. They should also have drilled into them then how easily the county societies may be developed

for systematic postgraduate study. The average physician in this country has done little studying after graduation, and the schools owe it to themselves, their students and the people, that in so far as they can guard against it, their alumni shall not leave them without instruction upon these important matters. They should also be told how and why by occasional joint meetings with the bar, teachers, ministerial associations, legislators, municipal, county and other officials, mutual instruction and understandings may be undertaken of infinite value to all.

Argument.—Good results from such instruction will be: (a) A medical profession more up to date in medical knowledge, resulting from (b) a better organized profession, including better city and county societies, and therefore (c) more ability to influence legislation that will lessen present evils and raise medical standards. (d) More successful physicians, financially, and therefore also professionally, since they may be better equipped. (e) A removal of the stigma of the "shiftless or unbusinesslike doctors," which at present has much to do with lowering the dignity of the profession. (f) The proper regulation of gratuitous practice and an end to pauperization of those well able to make compensation. (g) Better reports regarding vital statistics, etc.

The urging of this course is a direct outgrowth of the startling revelations made in the effort to organize the profession of this country within the last five years. Largely because of the entire and incomprehensible neglect of these important subjects in the past, even in the best medical schools, it was found that a majority of physicians in many States are in such poverty that they receive no periodical literature except the cheap or free trade journals; have few text-books which do not antedate their graduation, and in every way are so poorly equipped as to be unable to give their patrons the benefits of modern scientific treatment. In most States more than two-thirds of the entire profession had not had the benefit of membership and attendance in any medical society; that profitless, senseless discord existed in nearly half of the communities, the faculties of the colleges often contributing to this in no small degree where two or more exist in a community, and that in consequence of these conditions the profession as a whole has always been and still is held in such public contempt that it is powerless in most States and in the nation in securing and enforcing legislation in both civil and military life, most essential to the honor and usefulness of the profession, and still more so to the well-being of the people.

If medical graduates in the past could have been taught how they could have legitimately obtained practice and made a living, how and why they should live in peace and co-operation, or at least upon terms of decent respect, with their professional neighbors, and the importance of such unity of purpose and action in public affairs as would have enabled the power and influence of the profession to have been concentrated upon legislators and the other official classes, State and national, these evils, so disastrous to its good name and progress, would have been avoided or greatly minimized, and it would be unnecessary now to spend years to regain ground which should never have been lost, or in recovering that place in the public and official estimation which was forfeited by faults entirely within our own ranks. It is within our power, however, now to so educate the future physicians, while they are grouped together in the schools and are in the formative periods of their professional lives, as to avoid or greatly lessen these evils and to enable our great profession, in time, to come into its own. To this end the Association has determined to do all in its power to enlist the co-operation of both the schools and the examining board in each State and to press the work until these objects are attained.

CASE REPORTS.

A Case of Acute Appendicitis—Dr. Warren Montfort.

I was called to see patient November 23rd, 1906 at 7 o'clock p. m. Young man, 21 years of age. Previous health good, with one exception! one year previous had an attack of pain, which he and the physician who saw him then, thought was a case of cramp colic. Two doses of morphine given hypodermically relieved him then, so that he was able to ride five miles to his home. On November 3rd, after a hard day's labor, at night he ate a very hearty supper, after which he started to ride horse-back to the store two miles away. Soon after starting he began to have severe pain in the stomach and was compelled to return home. The pain rapidly grew worse. He had a pint of whiskey, and at once drank one-half of it and in a few minutes finished the pint. I was sent for and upon arrival found him vomiting profusely and suffering the most extreme pain. I gave 1-4 grain Sulph. Morph. at once, but as this gave no relief, repeated the dose at the end of 15 minutes. Even this amount of morphine had very little effect upon the pain and patient began to beg for another dose, which was not given. Examination at this time did not reveal much. No pain or tenderness in region of appendix, but there was

some tenderness near gall bladder. Patient said nearly all pain was at the end of breast bone. I was called to see patient again at 1:30 a. m. and found his condition much worse. Pain was not so severe and vomiting every few minutes; throwing up much bile. Pulse, too feeble to count; temperature, normal; great drops of perspiration on forehead. The abdomen was now beginning to swell very rapidly, showing peritonitis. I thought the gall bladder had ruptured. I stayed until 5:30 a. m.; thought he would die, so went home, but was soon recalled. When I arrived he was dead. He had only lived 12 1-2 hours from beginning of attack. I at once requested permission to have an autopsy. This was granted. I sent for Dr. Demaree, of Frankfort, who assisted at the post mortem, which was as follows: Abdomen greatly distended and very hard; as soon as a small opening was made, several loops of intestines jumped through the opening, accompanied by a large jet of bloody water which spurted two or three feet above the table.

The incision was then continued toward the Pubis; the blood and water that filled the abdomen flowed away very freely and as it flowed over the edge of incision pus could be seen mixed with the blood and more than a pint of pus must have escaped. I now lifted up the side of the wound on the right side and heard gas beginning to escape and could see the abdomen beginning to go down. The gas was escaping from a tear in the bowel. I now put my fingers down into right side and could feel the abscess cavity, which had ruptured and allowed its contents to mingle with the other contents of the peritoneum. The tear in the bowel was made by the rupture of the abscess wall; the appendix was black and very fragile; the intestines were fiery red and in several places had turned black. No further examination was made. My opinion is, the young man died from shock caused by the sudden rupture of the apendiceal abscess. I think this case should teach us several things—that the pain of appendicitis may be anywhere in the abdomen; that one may have appendicitis for some time and have no pain—as did this patient—until an abscess has formed, that every sudden attack of pain in abdominal cavity should be regarded with suspicion.

MEDICAL COLLEGE NEWS.

Dr. D. S. Hatfield, of West Virginia, has resigned his internship at the City Hospital to accept a promising position in his home State. Dr. T. A. Bell, of Georgia, was selected by the faculty to fill out the unexpired term.

Congratulations are due the following members of the 1906 class of the Louisville Medical College on their excellent showing in

their respective State Board examinations:—P. Norton, of Oklahoma, made 93.3%, the highest average among 33 applicants. Dr. D. S. Hatfield, of West Virginia made 97%, the highest average of 79 applicants representing the best colleges of the country. Dr. H. O. Smith made 96% before the Kentucky State Board, an average of 15.5% higher than any of the 12 applicants examined. In Indiana Dr. C. S. Baker, with 91.2% attained the highest average over a large class. Dr. V. L. Smith, of Texas, took second honors in his State over a large number of applicants examined.

MEDICAL MEETING.

On February 25th, next, the southern section of the American Laryngological, Rhinological and Otological Society will hold a meeting in this city. I would be glad if you would make a note of it in the news column of the State Journal for February. All those in the State interested in this special class of work are invited to be present. Papers will be presented by representative men from different parts of the country, some of whom are of national reputation. A short notice in the Kentucky News Department of the Journal of the A. M. A. might be of some service in helping along the attendance.

Thanking you in advance for your kind courtesy; I am, Yours very truly,

J. M. RAY

MEDICAL NEWS.

Arthur P. Hitchins, M. D., succeeds J. J. Kinyoun, M. D., as Director of the Biological Laboratories of H. K. Mulford Company.

Dr. Hitchins has been connected with the Mulford Biological Laboratories for the past eight years, during the greater period of that time having had personal charge of the preparation of Antitoxins and Curative Sera. He is well qualified to conduct scientific work connected with the production of anti-toxins and biological products.

W. F. Elgin, M. D., continues in charge and direction of the Mulford Vaccine Laboratories.

E. D. Reed, M. D., of Ann Arbor, Mich., has been engaged to direct research work, particularly in pharmacology and physiological chemistry.

OFFICIAL COMMUNICATION.

President Griffith announces the appointment of committees as follows:

Committee on Public Policy—C. Z. Aud, Chairman, Cecilian, Ky.; B. F. Bruner, Louisville, Ky.; D. G. Simmons, Adairville, Ky.

Member of the National Auxiliary Legislative

Councillors of the American Medical Association—C. Z. Aud, Cecilian, Ky.

O. H. Swango has been appointed Referee for Breathitt County by the State Board of Health.

COUNTY SOCIETY REPORTS.

The following reports from county societies were received just as we go to press—too late to be included in the other reports:

Calloway—The Calloway County Medical Society held its annual meeting at Murray, January 2, and elected officers for the year as follows:—President, Newton Evans; Vice-President, A. V. McRee; Secretary-Treasurer, W. H. Graves. Dr. Prince A. Hart was elected to membership. It was decided to hold monthly instead of quarterly meetings hereafter. Life Insurance Fee Resolutions of the State Society approved.

W. H. GRAVES, Secretary.

Pulaski—The Pulaski County Medical Society held its regular meeting January 10th, in the office of Drs. Parker & Parker. Dr. Sam Parker reported a case of tetanus. Dr. Allen read a very interesting paper, which we will send you for publication later. Dr. A. W. Cain read a paper on Epilepsy. Dr. Sam Parker read a paper on Capillary Bronchitis. Dr. Griffin read a paper on Contused Wounds.

THOS. R. GRIFFIN, Delegate.

Adair—The Adair County Medical Society met on the tenth day of January, with the following members present:—E. T. Sallee, U. L. Taylor, W. L. Grissom, S. A. Taylor, W. R. Grissom, W. F. Cartwright and C. M. Russell. William Blair, our stand-by, had sickness in his family and could not come. Our President was not present, and several members did not put in appearance. Dr. Sallee gave us a recitation on natural labor, which was well received, and discussed by every member present. No other member present who was on the program. The Society passed a resolution, requiring the Secretary to furnish a copy to each of our town papers, after having heard from all the physicians in the county, to the effect that every doctor shall send a statement every six months to his patrons, January and July. J. C. Gose, Knifley, sent his name and fee for membership. Two others agreed to do so, but up to this time have not. The time fixed for meeting hereafter is the second Thursday in every other month, beginning in March.

U. L. TAYLOR, Secretary.

Jessamine—Pursuant to a call of the President, T. R. Welch, the Jessamine County Medical Society met at the office of Dr. D. A. Penick, Jan. 17th, at 2 p. m., with the President in the chair. The following members were present:—J. S. Barnes, T. R. Welch, W. H. Matthews, D.

A. Peniek and J. A. Van Arsdall. Minutes of last meeting read and approved. T. B. Pearson read a paper, "A Case of Peculiar Action of Atropin in the Presence of Potassium Iodide." He gave a very complete history of an interesting case, dealing with the therapy of these two drugs in a very comprehensive manner. Discussed by all present, and all concurred with the author of the paper that it was an idiosyncrasy of the patient that produced the alarming symptoms in this case. The applications of W. H. Fish, T. B. Pearson and M. C. Pentz were received and reported favorably and they were elected to membership. After some discussion on the subject of rates and telephones the Society adjourned to meet February 21st, at 7 p. m., at which time Drs. Barnes and Peniek will read papers. J. A. VAN ARSDALL, Secretary.

Allen—Allen County Medical Society is doing good work; meets every Friday night, have some excellent papers and the doctors are taking an interest in reporting clinical cases. The physicians of the county are more sociable than at any time in the history of the county. We have 16 physicians in the county, 12 of same are members of our Society, two are members of societies in adjoining counties, and we have two yet out in the cold; but we feel sure that during the year they will be members with us. We have taken in one member this year, and collected dues for all the old members, and enclose check for all the dues. If you have any county in the State ahead of us, we would like to know the county and society.

A. L. WAGONER, Secretary.

Fayette—The Fayette County Medical Society met Jan. 15th, John W. Scott in the chair. President, A. H. Barkley was installed and assumed office. The post-graduate work was discussed, and it was determined that we should begin work at once. Geo. P. Sprague was appointed a member of the Board of Trustees of the Good Samaritan Hospital as representative from the Medical Society. E. M. Wiley read a paper on "Nerve Exhaustion;" full discussion followed by Drs. Sprague, Clarke, Roberts, Vanmeter, Stucky and Wiley. T. C. Holloway presented a clinical case—a persistent ulcer at lower end of laparotomy incision—original operation being for tubercular peritonitis. Discussion by Drs. Scott, Vanmeter, Barkley, Wheeler, Roberts, Marks, Estill, and Holloway. J. R. ESTILL, Secretary.

REPORT OF THE COUNCIL ON PHARMACY AND CHEMISTRY.

We reprint herewith from The Journal of the American Medical Association, for September 15, the first installment of the report of the Council of Pharmacy and Chemistry.

Additional installments will appear from time to time. The importance of these reports is too evident to need comment. For the first time in the history of the organized profession, a scientific commission, whose ability and probity is above suspicion, has reported on preparations regarding which heretofore we have had only the report of those interested, financially and otherwise, in their exploitation.

ACETOZONE.

A mixture of equal parts of benzoylacetyl peroxide and an inert absorbent powder.

Actions and Uses.—Benzoylacetyl peroxide belongs to a class of compounds known as the organic peroxides in which an excess of oxygen has been combined in such a way that it is somewhat slowly given off in a nascent condition. On contact with water it hydrolyzes, forming benzo-peracid and aceto-peracid which exert marked oxidizing and germicidal action. In consequence of this change, these compounds are thought to be particularly adapted for internal administration. The germicidal and antiseptic properties of this substance have been attested by the experimental results of several observers; It has been used in ophthalmic, aural and nasal practice with asserted good effects as an antiseptic. It has also been applied internally, especially in typhoid fever with a view to disinfection of the intestinal canal and appears to be an intestinal antiseptic. **Dosage.**—Acetozone is generally employed in aqueous solution prepared as follows: Add acetozone to warm water in the proportions of 1 Gm. to 1000 Cc. (15 grains to the quart), shake vigorously for five minutes, and allow to stand for about two hours. Decant the liquor as required. This solution may be drunk *ad libitum*, two quarts or more being taken by an adult in twenty-four hours. Acetozone is also used in oily solution as an inhalant. Manufactured by Parke, Davis & Co., Detroit, Mich.

ACETOZONE INHALANT.

A solution of benzoylacetyl peroxide in liquid petrolatum. Formula: One hundred grammes contain: Benzoylacetyl peroxide, 1.0 Gm.; chloretone (chlorobutanol), 0.5 Gm.; Refined liquid petrolatum; 98.5 Gm.

Dosage.—It is to be inhaled in the form of a very fine spray or nebula, best produced by an atomizer especially designed for oily liquids. Prepared by Parke, Davis & Co., Detroit, Mich.

ACET-THEOCINSODIUM.

Acet-theocinsodium, $C_7H_7N_3O_2Na + CH_3COONa$, a double salt of sodium acetate and 1,3-dimethylxanthine-sodium (theophyllinsodium).

Actions and Uses. — It has the diuretic properties of theocin, reinforced by the diuretic action of sodium acetate, and, being more soluble, it has been claimed to be more readily absorbed and better tolerated than theophylline. It is recommended in cardiac affections, nephritis, dropsy, etc. Dosage.—0.2 to 0.35 Gm. (3 to 5 grains), best given after meals. Manufactured by Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color and Chemical Co., New York).

ADNEPHRIN EMOLLIENT.

Recommended as a local application where prolonged use is required. Prepared by F. Stearns & Co., Detroit, Mich.

ADNEPHRIN OIL SPRAY.

The preparation is applied as a spray to the mucous membranes in congestive and inflammatory affections, preferably after washing with Dobell's solution. Prepared by F. Stearns & Co., Detroit, Mich.

ADNEPHRIN SOLUTION.

A sterile solution (1-1000 of the suprarenal active principle in physiologic salt solution containing one-half of one per cent. of methaform (chlorbutanol).

Actions and Uses.—The actions and uses of this preparation are described under Suprarenal Alkaloid. Dosage.—The dose internally is from 0.2 to 2.0 Cc. (3 to 30 minims) in water. Adnephren is also used in oily solution as a spray, see Adnephren Oil Spray, and in the form of ointment, see Adnephren Emollient. Prepared by F. Stearns & Co., Detroit, Mich.

ADRENALIN.

The active alkaloid of suprarenal gland, prepared by the method of Takamine, see Suprarenal Alkaloid.

Dosage—Locally 1-1000 to 1-5000 solution, as the chloride. Internally, 0.3 to 2 Cc. (5 to 30 mm.) of 1-1000 solution, diluted with sterile water. Manufactured by Parke, Davis & Co., Detroit, Mich.

ADRENALIN CHLORIDE SOLUTION.

Dosage.—See adrenalin. Prepared by Parke, Davis & Co., Detroit, Mich.

ADRENALIN SUPPOSITORIES.

1 part of adrenalin to 1000 parts of oil of theobroma (cocoa butter). Each suppository weighs about 1 Gm. (15 grains). Prepared by Parke, Davis & Co., Detroit, Mich.

AGURIN.

Agurin, $C_7H_7N_4O_2Na + NaC_2H_3O_2$, a double salt of sodium acetate and theobromine-sodium.

Actions and Uses.—It acts like theobrom-

ine, over which it has the advantage of great solubility and that it is well tolerated by the stomach. While inferior in diuretic power to theophyllin (which see), it is said to have greater power in sustaining the diuresis produced. Dosage. — 0.5 to 1 Gm. (7 to 15 grains), preferably in wafers or capsules. If in solution, this should be freshly prepared (with peppermint water) and without sugar or mucilage. Manufactured by Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York).

AIROL.

Airol, $C_6H_2(OH)_3(COOBiI)OH$)= $C_7H_6O_6IBi$, a combination of bismuth oxyiodide (subiodide) and gallic acid.

Actions and Uses.—As it liberates iodine in the nascent state in the presence of wound secretions it has been recommended as a desirable and efficient substitute for iodoform in the treatment of wounds, burns, skin diseases, gonorrhea, etc. Dosage.—It is used externally in the pure state or diluted with talc, or in the form of 10 per cent. suspension in equal parts of glycerine and water or as a 10 or 20 per cent. ointment with 2 parts of petrolatum and 7 parts of wool fat. Manufactured by F. Hoffman-LaRoche & Cie., Basle, Switzerland (The Hoffman-LaRoche Chemical Works, New York).

ALPHA-EUCAINE HYDROCHLORIDE.

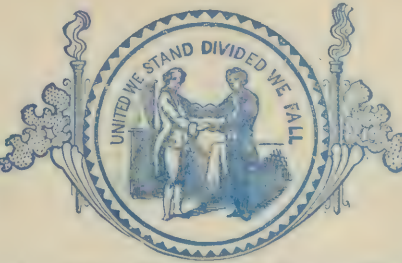
Alpha-eucaine hydrochloride is the hydrochloride of benzoyl-methyl-oxypiperidine-carbonic methyl ester.

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KENTUCKY MEDICAL JOURNAL

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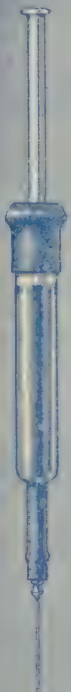
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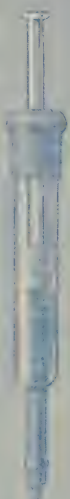
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VERNON ROBBINS

VOL. V, No. 2.

MARCH, 1907.

\$2.00 YEARLY.

GOOD NEWS.

We take pleasure in announcing the union of the Medical Departments of the University of Louisville and Kentucky University. The spirit of fraternity and organization among physicians could not be illustrated more clearly than by this union of two great institutions that they may the better be prepared for equipping young men for entrance into our profession. Half of the physicians of Kentucky look back to the University of Louisville as *Alma Mater*, and the joint alumni and united faculties will give the new institution a high standing and prestige all over the country. All honor to the men whose personal sacrifices have made such a medical college possible in our State. It will be a pleasure for the members of the Association to co-operate with the authorities of this great institution in its future work. This good news comes to in its future work.

Rumors are published in the Louisville papers of a union of the Hospital College of Medicine and the Louisville Medical College. It is stated that all is completed except the details, the new institution to be known as the Medical Department of Central University. Such a concentration and strengthening of college plants as this can only be productive of great good to both the profession and people of the future. Such institutions as the University of Louisville and Central University will attract the material resources of those philanthropists who are ready and waiting to aid such agencies for the welfare of the race.

RESEARCH WORK.

It is a noteworthy fact that most original discoveries in clinical medicine have been made by country doctors. Kentucky, in the past, has been particularly blessed with phy-

sicians who were willing to depart from the teachings of the masters of our art, to find for themselves new methods of combatting disease. The names of these men are household words to those interested in medical science the world over. To the members of the profession of Kentucky their example should be of especial interest and value. The opportunities for original research were never so great, the problems never more important. Of most diseases the cause is unknown; the treatment, therefore, empirical. To say that osteomyelitis attacks one bone and not another because the *locus minoris resistentiae* is to say we know nothing about it. Such problems might be multiplied through this number. We appeal to our younger readers to help fill in these gaps in accurate knowledge. They have the time and should develop the energy. Manual dexterity and operative technique may be most easily acquired on dogs or cats. Vascular surgery, the surgery of the chest and brain each present abundant opportunities for research work. The JOURNAL will be glad to publish the results of such studies.

PHARMACOLOGY.

To the thoughtful, every-day practitioner of medicine probably no other one thing causes so much trouble as the confusion and ignorance of pharmacology and materia medica. Poorly taught in even the best schools, many doctors have been distraught between an ignorant and presumptive therapeutic nihilism, a resort to the nauseous "shotgun" prescription, or to that *dernier ressort* of medical impotence, the nostrum or secret proprietary. With the advertising and reading columns of even our best journals open to specious and misleading claims about the indications for any sort of pharmaceutical product which would pay for space, it has been

small wonder that physicians generally have been guilty of serious derelictions in prescribing. Few doctors now prescribing have been taught much more while students about prescription writing than mere dosage and what "R," "3," and "3" marks mean.

For these and many other seasons which will occur to the thoughtful reader, it is with considerable pleasure that the Council announces that it has secured the consent of Virgil E. Simpson, Louisville, and Thomas C. Holloway, Lexington, to take editorial charge of the Department of Pharmacology and Materia Medica for the JOURNAL. Dr. Simpson as an internist and Dr. Holloway as a surgeon will each give especial attention to the physiological action, therapeutic indication, best methods of combination and everything else practical about the drugs we do or should use. We bespeak the especial attention of our readers to the new department, and will be glad to receive and publish papers and reports of cases bearing on this and allied subjects.

MEDICAL INSURANCE FEES.

The following counties in Kentucky have endorsed the State resolution in fixing five dollars as the minimum fee for a complete life insurance examination:—ADAIR, ALLEN, ANDERSON, BALLARD, BARREN, BATH, BELL, BOONE, BOYD, BOYLE, BREATHITT, BRECKINRIDGE, BULLITT, BUTLER, CALDWELL, CALLOWAY, CARLISLE, CARROLL, CARTER, CASEY, CHRISTIAN, CLARK, CLAY, CLINTON, CRITTENDEN, CUMBERLAND, EDMONSON, ELLIOTT, ESTILL, FLEMING, FLOYD, FRANKLIN, FULTON, GALLATIN, GARRARD, GRANT, GRAVES, GRAYSON, GREEN, HANCOCK, HARDIN, HARLAN, HARRISON, HART, HENDERSON, HENRY, HICKMAN, JACKSON, JESSAMINE, JOHNSON, KNOTT, KNOX, LARUE, LAUREL, LEE, LESLIE, LETCHER, LEWIS, LINCOLN, LOGAN, MADISON, MAGOFFIN, MARION, MARSHALL, MARTIN, M'CRACKEN, M'LEAN, MEADE, MENIFEE, MERCER, METCALF, MONROE, MORGAN, MUEHLBERG, NELSON, NICHOLAS, OHIO, OLDHAM, OWEN, OWSLEY, PENDLETON, PERRY, PIKE, POWELL, PULASKI, ROBERTSON, ROCKCASTLE, ROWAN, RUSSELL, SCOTT, SHELBY, SIMPSON, SPENCER, TAYLOR, TODD, TRIGG, TRIMBLE, WARREN, WASHINGTON, WAYNE, WEBSTER, WHITLEY, WOLF, and WOODFORD. In each of these practically every licensed physician has either

signed a county or the State agreement. In all but one or two every single doctor in the county, of whatever school, has signed both the local and State agreement.

Many and various will be the arguments, allurements and temptations offered doctors to violate their pledges. The New York Life is sending out from its Cairo branch to the doctors of the Purchase a two years' contract to continue examining at the present graded fee. The doctors of the Purchase are too wary and well organized to be attracted by any such pretended contract. They know the New York Life is already paying \$2.50 in some places, and even less, and the journals of other States show that the agents of all the companies are putting up the extra \$2 wherever it is necessary.

The Mutual Life of New York, through its personally delightful medical department is getting out reprints of the so-called brief which was presented to the Committee of the American Medical Association. The Committee answers this garbled statement in its report published in this JOURNAL. Many of the statements made by this company are misleading, the statistics and figures particularly so, and their concluding statement that 14,000 of their medical examiners have accepted their schedule is ridiculous. The physicians of Kentucky will stand shoulder to shoulder in this matter, and if these companies write no business in the State, as we hope will soon be impossible, there are numerous good companies, never tainted by corruption and extravagance, which will write as good or better policies for the people, and, at the same time, pay a reasonable fee.

The statement that the county societies are on a strike because they have united against an attempted spoliation of their members by the insurance trust is too absurd to need an answer. Let them say what they will. If we stand together they must either quit business in our community or must pay the reasonable minimum fee demanded by the profession.

THE PRICE OF THE MAN.

In a recent issue there occurred an editorial entitled, "Poverty and Incompetency—" and it was pleasant to note that even if we be poverty stricken and caught without the "goods" the familiar statement "poor, but honest" was not disproved. If the latter be true, the acquisition of poverty is complimentary to our profession as it appears to be the rich who are accused as grafters. Our skin grafting does not bar honesty.

It is the belief that our profession is hon-

est in their effort to do good, some are not as capable as others and the law provides the standard, gauged according to the community in which we live. However, the grade or intellectual standard of the community should not check one from trying to improve, and it is the belief and it has been my observation that the average doctor, even if he lives far in the country, is still a student as far as his time will permit.

The fault to my opinion is that we are not honest to ourselves.

Is it honest to ourselves to be jealous? Is it fair to fear to render a bill in proportion to the services rendered. Even if the patient quits, is it not better to lose his work than to gain a reputation as a cheap man. Who is to gauge our price? If we are professional men, is it not becoming to the man to place a price upon his work? Is it not the price of the man that gauges the individual worth? Is it honest to ourselves to divide fees? Both render service to the patient, and why should one rely upon the other to be his collector? Would it not be more professional for each to render a statement (with the expectation of it being paid) in proportion to the value and worth of the services rendered?

Has the practice of medicine, with its wonderful change from a few empirical remedies to almost a true science, degenerated from the doctor of the old school, respected for his knowledge, goodness and true worth, to a plane of soliciting commercialism?

Let us do good and sincere work—"deliver the goods," and then render a statement or bill for what we think our services are worth, and the profession will be better, to say nothing of ourselves.

J. J. M.

A. M. A.—ATLANTIC CITY.

The next annual meeting of the American Medical Association will be held in the famous seaside resort, Atlantic City, from June 4th to 7th next. The Council is arranging for special accommodations for the large number of Kentucky physicians who will attend this meeting. The American Medical Association is the largest and strongest medical organization in the world. This will be its greatest meeting. The railroad rates will be lower than ever before. Hotel charges will be low. Special opportunities will be afforded for a beautiful side trip by boat to the Jamestown Exposition, with stop-overs at Baltimore and Washington. No more delightful combination of duty and pleasure was ever offered our profession. The Baltimore & Ohio Railroad will be the official route and

other arrangements including the cost of everything will be announced later. Every county in Kentucky should be represented.

THE ISOLATION OF SMALL-POX UNNECESSARY.

The discovery of vaccination by Jenner was published in 1796, but its general acceptance as a preventive for small-pox was long delayed by the determined opposition of the members of the medical profession.

The theory of acquired immunity from the disease through vaccination is now generally accepted, but many of the rules and regulations of boards of health ignore this fact in actual practice. The extravagant expenditure of money for maintaining a quarantine for those exposed to small-pox is the usual procedure, and much suffering and violent prejudice everywhere follow its enforcement.

The natural sequence of this practice is delayed vaccination, for so long as the boards of health and the medical profession deem it necessary to quarantine cases of small-pox, so long will many people refuse to accept the fact that vaccination is a thorough protection against the disease.

For, if so, why the necessity of isolating those so affected? The only counter argument is that many neither want small-pox or vaccination, and prefer that the State be at heavy expense to protect them from both. This position, even if correct in theory, is impossible in practice, for isolation is not a success. Then, if we must have one and cannot have both, let each man select the one most agreeable to his taste, environment, and constitution.

Of course the fact is recognized that this course cannot be followed by one community alone for commercial reasons; but let each State adopt the same plan (and all know that vaccination is an absolute protection from small-pox, and the *only one*) then the City Physician everywhere will be vaccinating by request, where now he does so by force. Why should Mr. A. be removed from his home to an uncomfortable and badly conducted "pest house," simply to protect Mr. B. and his family from sore arms? If Mr. B. objects to small-pox in his neighborhood, let him secure for himself the protection afforded by vaccination, which is always to be had from his city or county authorities without expense if he is unable to pay for it.

If Mr. B. is unwilling to thus protect himself, then he must accept the condition of his choice and take his chances of small-pox.

This may seem strange reasoning coming from one who has worked hard and persistently enforcing vaccination laws and quaran-

tine measures, but just such work has demonstrated the fact that the opposition so generally met with is but the reflection of seeming professional doubt. For if vaccination is a protection, as the medical profession has maintained that it is for over a century, whence arises the necessity for isolation, which is both troublesome and expensive?

It is clearly established that one successfully vaccinated prior to exposure to small-pox cannot contract the disease, or, at least, is not more susceptible than one who has had small-pox is susceptible to reinfection. We all know that there are but very few cases on record where one has suffered the second attack of small-pox.

Then, for the sake of argument, if vaccination should lose its efficiency after a period of years, would it not be more scientific, and therefore more reasonable, to re-vaccinate, rather than to isolate? When people are convinced that vaccination is their only protection against small-pox, they will vaccinate, and re-vaccinate, of their free will and accord.

Here permit the statement that vaccination will not be successful more than twice in any one person, no matter how long-lived; and certainly two vaccinations (if a person be so unfortunate as to be susceptible to the second) is a very small tax for the prevention of so loathsome a disease.

It may be contended that the infants too young to be vaccinated will suffer. This is not true, however, because they are never too young.

The infant suffers less from vaccination than the adult, for the reason that the wound, or vesicle, is less frequently disturbed, and therefore not so often infected. In our experience, a child only three days of age was vaccinated, the mother having small-pox at the time of birth. The vaccination went typically through each stage, greatly modifying the smallpox which followed; the vaccinia causing only slight disturbance.

The day is coming when the quarantining of small-pox cases will be looked upon with as much scientific disapproval as were the efforts in 1905 at quarantining yellow fever. And this disapproval will be more pronounced in the case of small-pox, for after successful vaccination no accident can happen, whereas in the case of yellow fever, the mosquito may feast and flee before a diagnosis is possible.

We should cease fighting a battle won in the Eighteenth century, and spend our time, energy, and the public money given us, fighting tuberculosis, pneumonia, scarlet fever, and the other contagious and infectious diseases against which we have as yet no posi-

tive protection; and, as in the cases of small-pox and yellow fever, finally we will conquer them all.

J. C. M.

\$100 REWARD.

The Mississippi Valley Medical Association is a part of the National Medical Organization, to membership in which the physicians of Kentucky are eligible, and to whose success they have contributed no little. H. H. Grant, Louisville, one of our most distinguished surgeons, is President, and H. E. Tuley, Louisville, has been its very efficient Secretary for several years.

Under the auspices of this Association, and open to its members, there will be a prize contest, with a reward of \$100 for the best essay on some medical or surgical subject. The essay must be typewritten, and must reach Dr. Tuley before August 1, 1907. It is to be hoped that some Kentucky member of the Mississippi Valley Medical Association will capture the prize.

SCIENTIFIC EDITORIALS.

THE ARMAMENTARIUM OF THE OBSTETRICIAN.

BY EDW. SPEIDEL, LOUISVILLE.

Nothing perplexes the newfledged graduate more than a proper equipment for his labor cases.

He scrutinizes the elaborate lists outlined in the various text books and finds them usually too unwieldy and bulky for the work that comes to him in the first few years of his practice.

If he equips himself as advised in the text books, then he is soon confronted with a number of confusing conditions. He may find in a sudden succession of cases that it requires too much time to keep his obstetrical satchel in condition. He will be discouraged to find that the elaborate preparations on his part are almost nullified by the more or less unclean surroundings in which he conducts his work. Finally he finds that very few of the things he carries are required in the average labor case. This, perhaps, in connection with the meagre financial reward that meets his efforts in properly conducting his labor cases inevitably leads to his gradually discarding more and more of his equipment, so that he finally gets into the slipshod habit of not even carrying the essential things necessary for an ordinary labor case, then when he meets with a complication, he is entirely unprepared and much time is lost and hours

of unnecessary suffering are inflicted upon the patient, before he can send for the articles needed and have them in proper condition.

As nearly all obstetrical cases are conducted by the general practitioner, and the majority of such cases occur in private houses, it follows that infirmity rules and regulations will not apply.

It is most satisfactory under all circumstances, to carry a full equipment, that is, one that will meet all the ordinary complications that may occur in a labor case. The equipment should be arranged in such a manner that it is ready for immediate use, that is, all instruments should be carried ready sterilized.

There is only one ordinary household utensil that is suitable or large enough to hold the obstetrical forceps if they need sterilization in a private house, and that is the ordinary dish pan. The large size of such a pan and the unusual amount of water necessary to cover the instruments for boiling, results in a long delay before they are in proper condition for use at the bedside. Many a lacerated perineum would have been repaired, if the physician had carried the instruments needed for such work, ready for immediate use in his satchel.

The lists in the various text books are all serviceable if the articles are carried in such a manner that only those that are needed in the special case are contaminated.

The writer has long been in the habit of carrying his equipment in separate packages, the first containing the equipment for the ordinary labor case, the second that for operative cases and the third that for obstetrical emergencies.

The contents of each package may be altered to suit the requirements of each physician, the following list is simply to serve as an illustration of the method:

A tin box 4 by 12 inches with a hinged lid, that can be made at any tinner's, will easily carry all the following articles needed in an ordinary labor.

Six-piece package of ordinary sterilized gauze.

A skein of corded silk for tying the cord.

Powd. Boric Acid.

Stearate of Zinc and Bals. Peru.

Chloroform.

A collapsible chloroform mask.

A sterilized Hand Brush.

Scissors.

Small Scale for weighing the baby.

Fld. Ext. of Ergot.

A box containing 3 Ampules of Ergot Asep-

tic for hypodermic use.

Bichloride Tablets.

1 Doz. 5 gr. C. C. Quinine Pills.

2 % Sol. Nitrate of Silver.

A Dropper.

The six piece packages of gauze are prepared, by cutting a 25 yd roll of sterilized gauze as furnished by the manufacturers, in six inch widths, wrapping six pieces in muslin sheeting again sterilizing the whole, when the packages will keep indefinitely in a clean place.

The chloroform is carried in a 2 oz. dropping bottle. The Boric Acid, Stearate of Zinc and Bals. Peru and Bichloride Tablets in 2 oz. glass stoppered screw cap bottles.

After an ordinary labor it is only necessary to place a new package of gauze and clean brush in the box and the physician is ready for his next case.

The bottles will only need occasional refilling.

For package No. 2 a small copper sterilizer 16 by 5 by 3 inches will be found most serviceable as it will serve for immediate sterilization in the house if that should become necessary at times.

In this are carried:

A long and short obstetrical Forceps.

Axis Traction Rods and a soft rubber catheter.

These articles, ready sterilized, are wrapped securely in a clean towel.

In addition, 3 tube boxes of No. 0 Plain No 1 & 2 Chromicized Catgut and a tube of Vaseline with an extra package of 6 piece Sterile gauze, are placed in the box, and a small wrapped package containing needles, two artery forceps, scissors, needle-holder and 1 dozen strands of silk worm gut all sterilized, for immediate repair of the perineum.

Formerly these articles were included with the package containing the forceps, but as a repair of the perineum often is called for in cases in which the forceps are not used, necessary resterilization of those instruments is avoided by carrying this separate package.

The third package need not necessarily be carried to every labor case, but should be kept ready sterilized and wrapped in a clean towel. It occupies but little space and is like the proverbial pistol in Texas when an emergency arises.

It contains the following articles:

Sim's Speculum.

A single and double tenaculum.

Uterine douche tube.

Placental Forceps.

Sharp Curette.

Aspirator Needle.

Uterine dilator.

The various packages are carried in an obstetrical satchel 9 by 17 by 9 inches and in it are placed in addition, a clean gown or apron, a rubber obstetrical pad, a pair of sterile rubber gloves and several wrapped sterile 2 inch gauze bandages as sold by the manufacturing houses, the latter to be used as a gauze packing of the uterus in uncontrollable post partum hemorrhage.

One can readily see that with such an equipment, the obstetrician is ready to meet any emergency at a moment's notice, whilst ordinarily, the satchel can be put in readiness for the next case with but little trouble.

GENERAL NATURE OF PHARMACOLOGIC ACTION.

BY VIRGIL E. SIMPSON, M. D., LOUISVILLE.

Two methods of study may be applied in an investigation of the general mode of drug action: a study of the general principles involved and then making an application of these to details; or, the mastery of the details primarily and utilizing these as the basis for deduction of general principles. Either method possesses advantages, as well as, drawbacks. The former plan will be adopted here.

To the beginner the principles outlined below might seem uninteresting details, but to the practitioner the full meaning of the facts, theories and applications of pharmacology should afford pleasure in their mastery.

GENERAL PRINCIPLES OF DRUG ACTION.

The Living Cell:—A cell is a most complex laboratory in which are constantly going on chemic decompositions, synthesis, oxidations and reductions. The final expression of these chemic changes, which result in transformations of energy, is found in the phenomena of life. Physio-chemic transformations are, therefore, inseparably associated with the vital manifestations of the cell, but the existence of certain physical and chemical conditions are necessary for their proper occurrence. These physical requisites are: a viscid medium, containing water, fats, salts, and colloid proteids. The chemic essentials are: (a) the presence of a substance capable of liberating energy; (b) the conditions suitable for reaction as, proper temperature, alkalinity, presence of ferments, etc.

Pharmacologic agents, it becomes evident, must act by a modification of the physical properties of the cell, or of its chemic composition. The action of drugs, then, may be expressed as:

- (a) Physical.
- (b) Chemical.

Physical: The solution or removal of fatty constituents of a cell (cholesterin and Lecithin principally) invites important physical changes by an alteration of the cell's permeability and colloid aggregation. It is on this function that a large part of the action of alcohol, general anaesthetics and some toxins, rests. The most characteristic effect, physically, is exhibited on the proteid constituent, and is produced by (1) The formation of albuminates by such drugs as acids, alkalies and metals; (2) by hydration or dehydration, as in the case of the coal tars, alcohol, water and neutral salts; (3) by the imponderable remedies, heat, light, electricity, etc. Common salt absorbed into the blood changes its osmotic tension resulting in an alteration of the distribution of fluid in the tissues. The irritant effect produced by introduction of foreign molecules into the cell is, also, largely physical when they do not enter into chemic reactions and result in a disturbance of the normal mechanism of the cell. Inert oily bodies applied to abraded surfaces protect them from irritation and prevents evaporation of fluid, thus promoting healing. Summing up, the physical effects of drugs consist principally of solution of cell constituents, precipitation, solidification and mechanical.

Chemicals: Many processes of pathologic, as well as normal organism have been shown, in recent years, to be dependent upon what are strictly pharmacological actions. Animal extracts, toxins, antitoxins and diabetic coma may be mentioned and the end is not yet.

It is recognized that there is a very intimate inter-relation existing between strictly chemic actions and the physic ones mentioned above, and that a line is with difficulty drawn. It is also conceded that chemic actions are more difficult of demonstration. Since proteid molecules have a complicated structure they are, therefore, capable of a great number of reactions; this is evidenced by the range of substances utilized by a cell, and further by an acquaintance with its terminal excretory products. The chemic combinations entered into by a drug and the elements of a cell are often loose and unstable as proven by the speedy recovery of an aquatic animal from the drug effects when placed in pure water.

FUNCTIONAL MANIFESTATIONS OF DRUG ACTION.

Quantitative Not Qualitative: While protoplasm has, in a general way, kindred chemistry and structure, and functions, in a broad sense, similar, yet there is much difference existing in groups of cells or even individual cells, for instance gland cells and muscle cells. It must be borne in mind, how-

ever, that such differences are largely quantitative and depending largely upon specialization of the cell.

Since protoplasm molecules are essentially identical in all cells it is to be expected that the action of drugs would be essentially the same. But just as quantitative variances are found in the cell also will drugs show selective action and quantitative differences. These two fundamental laws may be emphasized: (a) a drug does not create a new function in a cell; it can but modify or abolish the cell's innate functions, or bring into activity those previously latent; (b) that generally, a drug causes the most patent changes in the most conspicuous function of the cell, because first, these functions are most keenly appreciated and second, because a specialized function is more complex and, in consequence, more sensitive.

Stimulation: The greater number of drugs cause stimulation as a primary physiological effect even though depression follow almost immediately and constitute its characteristic action. The activity is an increase only in degree, however, and not in kind. By virtue of a drug action a *reflex* movement may be made more or less powerful than is normal, but it is still a reflex action and can never aspire to consideration as a voluntary movement.

When the stimulation of one set of cells causes an inhibitory influence on another set it is properly designated as an *excitation*. The influence the vagus, when stimulated, has on the cardiac muscle is an illustration.

A line of difference may be drawn between stimulation and *irritation*. The first can be construed as an increase in activity of the specialized function of a cell; the latter refers to such changes in condition as are common to living matter in all forms—changes in nutrition and growth; the former effect is exhibited in highly specialized cells, as the heart, glands, etc.; the latter is the common change produced by drugs in less differentiated forms, as ordinary epithelial and connective tissues. An agent that withdraws fluid from proteids, precipitates or dissolves them, tends to cause irritation. A violent stimulation, which if continued would result in injury, is called irritation.

Depression: This result of drug action resembles fatigue induced by undue exercise of a normal cell—an identity in appearance, but not in cause. The depression due to moderate and prolonged stimulation may be due to disappearance of food supply, which is *exhaustion*; or to actual injury of structure, which is *fatigue*. If continued to the point

of disappearance of function it is *paralysis*; and finally if all the functions are completely abolished it becomes somatic *death*. A cell may be said to be functionally dead when there is absence of functional performance, but this does not imply death of the organism for it may recover in such cases. There are a few depressants in which no primary stimulation can be determined. It is rare for depression to have priority to a stimulation, and when such does occur it is presumably on different structures.

SELECTIVE ACTION OF DRUGS.

It has been stated above that there exists a great similarity in the effects of drugs on every structure, but that there are differences existing in details rather than principle. It is patent that these individual peculiarities of drugs are of immensely greater importance than the underlying similarity. This *elective affinity* is not merely a question of degree as to results, but the drug forms temporary combinations with some forms of protoplasm and alters, augments or abolishes the function of the cell possessing this form. These differences are attributable to (1) the cell, (2) an interaction of varied functions, or (3) to the drug.

Selective Absorption: As stated at the outset as a general rule, a drug must be absorbed into the cell in order to produce its physiological action; therefore the drug must be either soluble in the cell contents and envelope, or it must be volatile. The degree of solubility is not of necessity the same as for water; its solubility varies even for each kind of cell, e. g., the permeability of renal cells for sulphates is of high degree, while the intestinal cells possess but the slightest degree. This factor helps to explain two things: 1st, why a cell is capable of maintaining its own composition regardless of the changes in fluids with which they come in contact, and 2nd, why a given drug produces more response in one cell than another.

Affinity for Certain Constituents of Cells: If a given cell possess a larger amount of a certain material than another cell, a given drug will affect that cell more profoundly; for instance, ether dissolves fatty substances (cholesterin and lecithin especially) and therefore has its greatest action on those cells containing large quantities of fat, viz: nerve cells.

Affinity for Groups of Molecules or Side Chains: These are not present in every cell and in those in which they are present, may be a natural or acquired possession. The comparatively recent knowledge of the production of specific prescriptions is an evidence

of individual chemie distinctiveness of each class of cells. This also affords an explanation, yet a theory, as to how toxins show selective affinity.

Warehousing the Drug: This is simply absorbing it more rapidly and readily than it can be eliminated. It explains the selective action of some drugs of metallic origin.

Disintoxication: A cell either by changing the chemical composition of a drug (oxidation or reduction), by rapid elimination, or by the genesis of an antitoxin, may render such poison incapable of doing damage. The clinical necessity of repetition of dosage to preserve a continued effect, as well as, continuously increasing the size of the dose, in the case of many drugs, finds a part of their solution here. And further, therapeutic use of drugs could not obtain if cells did not possess this property, together with elimination, of destroying poisons and recovering.

Effects of concentration: The totality of drug absorption by a cell depends largely upon the concentration of same in the fluids in which it is bathed. The greatest concentration, naturally, is at the points of entrance and exit of the drug. The physician is thus enabled to medicate the liver, lung or kidney at will by the exhibition of such drugs as are eliminated largely by these respective organs. The ill effects of ether on the renal structures following its inhalation is an unfortunate example of concentration. It would appear that the effects of some drugs out of proportion to the concentration, can be explained by the entrance in the field of other factors concerned with selective action, e. g., exhaustion, habituation, etc. The purely *local action* of a drug is often entirely different in nature from its general action, or it may possess no systemic effects at all. Drugs absorbed in an inert form, those nonabsorbable, and such as are excreted as rapidly as introduced possess only a local influence. On the other hand, while drugs generally change such cells as they come in contact with directly, the alteration of a certain part of the organism may entail another part though the drug have no special affinity for the latter, or does not have access to it. An irritation of the skin can alter the pulse rate, the impressions being transmitted by the cutaneous nerves and reflected to the heart by the inhibitory nerves thereof.

Production of Toxic Decomposition Products: Drugs belonging to this class may themselves be innocuous, but will readily undergo decomposition where conditions are favorable, liberating one or more of its constituents in nascent form and thus act selectively

on such tissues. For example: the iodids decompose readily in presence of acids with liberation of iodine.

Cell Structure: In this last factor that will be mentioned, the explanation of selective action is not infrequently found. It is a physiologic law that the more delicate functions are more readily, as well as, more profoundly affected. A drug that possesses but an indifferent action on all tissues generally, will invariably produce the most conspicuous effect on the central nervous system. Again, nerve fibres are themselves so peculiarly resistant that they are only affected when a poison is applied to them directly.

THE ENLARGED PROSTATE.

By JOHN R. WATHEN, M. D., LOUISVILLE, KY.

The radical operation for the removal of the enlarged prostate first attracted the attention of surgeons a little over six years ago and since that time much clinical data has been added to our knowledge concerning operations upon this organ. We now recognize the following conditions demanding surgical treatment: the large adenomatous or hypertrophied prostate of which type are the great majority, the smaller sclerotic prostate, the cancerous prostate and, lastly, the chronic inflammatory type of prostate, which is usually due to gonorrhoea and which has resisted all other methods of treatment.

Hugh Young has recently well said: "The prostate plays a very important role, viz., that of a urinary organ, and that of a sexual organ. The act of micturition, which is one of the most remarkable of our reflex actions, is largely carried out by the delicate nervous and muscular mechanism of the prostate."

The relief of the symptoms resulting from the hypertrophied prostate in old men has in the past been most difficult and highly unsatisfactory, for the reason that all palliative measures in a short time fail, and no radical procedure had been introduced which was entirely successful. The frequent and painful urination, the continued use of the catheter, the residual urine, and the resultant cystitis, seem to the writer to demand surgical intervention in the great majority of cases.

Granting that the physician has exercised much care in the treatment and the instruction of his patient, it is undoubtedly a fact that these old men become very careless in following the physician's instructions, and sooner or later reach the stage which not only demands operation to save life, but also places the patient in a bad condition to derive the greatest benefit from surgery. In no class of cases would early surgical intervention be of more value than in the enlarged prostates,

and to-day when operated upon, a most favorable time, with the new technique developed, should give a very low mortality. But when infection has taken place we have the risk increased many fold. Having, therefore, taken the position that as soon as the enlarged prostate causes pain and frequent urination, and perhaps necessitates the use of an occasional catheter, it is better to use radical than palliative methods, the writer will devote this paper largely to a discussion of the choice of methods of removal of these enlarged prostates.

L. S. Pilcher says: "It is of interest to note, in surveying the literature of the subject, that among the many different methods of attacking the prostate which have been proposed by different surgeons, practically equally good results are reported to have been secured by the most diverse methods, by men who had become specially skilled in their application."

Nevertheless, we have about reached a time when we should make deductions from the combined clinical and pathological contributions to literature, and begin to formulate views as to the choice of the correct technique to be employed in the removal of the enlarged prostate.

What we need is not to adopt a method which has been successful in the hands of a few especially proficient, but a technique which will be the safest, the easiest, and offer the best results as to permanent cure of the patient. The enlargement of the hypertrophied prostate, according to Deaver,—"occurs in two main varieties—one variety, the glandular or adenomatous overgrowth, constituting the majority of cases; while the fibrous enlargement constitutes the minority, and even at times approaches more nearly in type to prostatic atrophy, or to sclerosis of the neck of the bladder, or is at least conspicuous by the relatively slight enlargement compared to the magnitude of the symptoms produced."

Based on these generally accepted views as to the pathological anatomy of the hypertrophied prostate, should be our operative methods for its removal.

In those large, soft adenomatous prostates, which rise up into the bladder and are often found to have a pedunculated middle lobe, it is generally conceded that they are the easiest removed by the suprapubic route, while the dense fibrous variety, situated low down in the perineum and often associated with them, an inflammatory condition, had better be enucleated from below by the perineal route. The intermediate type, and the writer believes this to be the most common variety,

where we have a medium-sized enlargement of the two lateral lobes, is the prostate which seems to cause the greatest divergence of opinion as to its method of removal.

The diagnosis in typical cases becomes comparatively easy if we will introduce one or two fingers into the rectum and with the other hand press upon the abdominal wall over the bladder as is done in gynecological examinations of the uterus—called the bi-manual method.

This latter method is especially applicable when the patient is under the anaesthetic and ready for the operation.

While the cystoscope and other methods are recommended for examination of the prostatic enlargement, such procedures do not meet with general approval and are only to be employed in special cases and by those who are very proficient in the use of such instruments. It has been the writer's experience that the less instrumentation before operation, the better for the welfare of the patient.

Having determined the type of the prostatic enlargement we have to deal with, and the method of its removal, by the suprapubic or the perineal routes, we are now confronted with the question of the best special technique to employ in the particular route. The suprapubic route, which has been so popular in England, due largely to the excellent work of Fryer of London, certainly has much to recommend it, especially in those types of prostates where a large adenomatous mass projects high up into and almost fills the bladder. Mr. Freyer is inclined to think that all hypertrophied prostates are best removed by this method.

White, after discussing the suprapubic route, says: "As to the other methods of prostatectomy—the perineal, the 'combined,' etc.—there can be no doubt that they have often given good results in the hands of some surgeons, and are still the methods preferred by a number of able workers in this field."

"There are probably cases for which they will always be found suitable, but at present it appears to me that past experience does not justify the expectation that the results of prostatectomy by the perineal route will compare favorably with those of the total enucleation above described."

While there has been much dispute of late as to the priority of the suprapubic operation, yet the essential principles are practically the operation as done by Freyer.

The perineal route which has become so popular of late in this country, and has even been styled the "American operation," has so many various procedures that to properly discuss the method each surgeon's individual technique would have to be considered. The

simplest and most rapid operation is that employed by Goodfellow.

Parker Sims has practically the same technique with the exception that he introduces a rubber ball tractor to aid in bringing down the prostate into the perineum for easier enucleation.

Hugh Young employs a metal tractor and a more elaborate dissection and claims by his method alone to do a conservative operation, preserving the ejaculatory ducts; but the reports of many operators employing a different technique, namely Goodfellow, show that a considerable number of patients have reported the occurrence of apparently natural ejaculations. Irvin Abell has well expressed the writer's views when he says:

"The question of operating so as to avoid injury to the ejaculatory ducts, has been rather widely discussed, but to the writer, their preservation seems to be of little moment; granting the loss, health and comfort are of more value to a man than they at the period of life at which this condition demands operation."

G. C. Hendon has recently said:—"Some operators can remove the prostate better by the perineal than by the suprapubic route. and *vice versa*, so that the situation of the gland and the habits of the operator are two important factors that ought to determine a surgeon in deciding which route he will employ."

The question of the mortality of prostatectomy has been discussed by almost every writer upon this subject and where it will always command attention in any operative procedure, the statistics from the limited number of collected cases can hardly be fully accepted as yet. After the question of mortality, there is no more important one for consideration in the selection of the method of operating on the hypertrophied prostate, than that of the after-results. Among the many sequels of this operation, are those of incontinence, fistulae, both urinary and rectal, and the loss of ejaculation, the last one having been previously discussed. Incontinence has followed all the various methods in some degree, but the suprapubic seems to have occasioned fewer cases of this annoying condition. Many times a temporary incontinence occurs and a few months later the patient gradually regains control over his bladder.

According to Ruggles, incontinence is due to injury to the compressor urethra muscle and not to the neck of the bladder as so many have supposed.

Dunning Wilson reports the cure of two cases of incontinence which followed prostatectomy and gives his method as follows:

"The treatment of dribbling consists in bladder irrigation, with the addition of filling the bladder full of the irrigation solution, instructing the patient to voluntarily contract his compressor urethrae muscle. After doing so, he is told to expel a small portion and again shut off, thus dividing the evacuation of the fluid into from five to six conscious and voluntary efforts. Instructions are given that when the bladder fills with urine, its evacuation should be divided into five or six portions in like manner. By this method we gradually bring the cut-off muscle up to its normal tonicity and as a result the incontinence ceases."

Urinary fistulae are a frequent occurrence after the perineal method, but the majority of the cases close in a few weeks. Curettage of the fistulous tract will usually effect a speedy cure.

Rectal fistulae are much more difficult to cure and are probably produced by too tight packing of the gauze against the rectal wall. Some cases may result from injury or tear and others from the low vitality of the patient, with a slough in the perineal tissues. Often the fistulae will close when the perineal incision finally heals up.

While the hypertrophied prostates constitute the great majority of the enlargements or pathological conditions of this organ, cancer has been met with often enough to attract a more careful study.

Albarran has found it to occur in about ten per cent. of his cases of prostatic enlargement, and Hugh Young has recorded in his experience about fifty cases of cancer of the prostate, some of which were operated upon by his new technique.

Concerning the diagnosis of cancer of the prostate Young has recently written:—"The onset symptoms in most cases were similar to those of benign hypotrophy, viz., slightly increased difficulty and frequency of urination; but in about 30 per cent. of the cases pain was present, an unusual symptom in cases of prostatic hypertrophy."

"Pain has been a prominent symptom often entirely out of proportion to the extent of the disease and the obstruction present. It generally appeared as a dull pain in the suprapubic region, which became worse as the bladder became full. During urination in about 25 per cent. of the cases, there was pain in the urethra, often referred to the end of the penis, but sometimes limited to the deep urethra or perineum."

"Loss of weight has been a prominent symptom, often occurring early in the disease, and being much more pronounced than in simple hypertrophy cases."

"The cystoscope has been of the greatest

assistance in making the diagnosis of early cases, as it has shown a distinct and radical difference in the intravesical picture, from that seen in cases of benign hypertrophy."

"If residual urine in considerable amount is present without the presence of intervesical lobes as shown by the cystoscope, our suspicion may be considered further strengthened."

The operative treatment of cancer of the prostate should be radical, if at all, and should consist in removing the organ entire with its capsule and seminal visicles.

Besides the various types of hypertrophied and cancerous prostates, there is still another pathological condition which has recently attracted some attention, viz., the chronically inflamed and enlarged prostate, due usually to infection, especially the gonorrhoeal type.

After all other methods have failed to effect a cure the lateral lobes have been removed as in a perineal prostatectomy and unusually good and rapid results reported.

The writer recently had the pleasure of seeing Hugh Young perform his eighth operation for this condition.

In conclusion it may be said that there are distinct indications for the choice of operations in prostatectomy which should be based upon the various conditions of that organ.

Those operators, who in the future will carefully study the many and varied phases of pathology presented in the enlarged prostate and apply that operative technique which is best suited to each individual case will be able to report the largest percentage of complete cures.

ORIGINAL ARTICLES.

TUBERCULOSIS OF THE PERITONEUM.

BY LEWIS S. MCMURTRY, M. D.,
LOUISVILLE, KY.

Some years ago I reported to this Society a case of tuberculosis of the peritoneum, which was cured by abdominal section. Since that time I have treated additional cases, and have observed all varieties of the disease. In the meantime, our knowledge of the pathology, and especially of the mechanism of infection, has materially advanced. The literature of the subject has grown to be voluminous. No disease encountered by the abdominal surgeon presents more intricate problems of infection, nor more interesting questions of pathology and diagnosis than peritoneal tuberculosis. The importance of

early diagnosis, and the excellent results following surgical treatment in selected cases, commend the consideration of this disease to all medical practitioners.

Tuberculosis of the peritoneum has but one cause—the invasion of the peritoneum by tubercle bacilli. Clinically the disease is observed most frequently in patients between the ages of twenty and forty years. Operation statistics show the disease is found more than twice as frequently in women as in men. The route of invasion anatomically afforded by the fallopian tubes naturally occurs to mind in explaining the greater prevalence of the disease with women.

To determine the route of infection is one of the most difficult problems presented in the study of this particular exhibition of tuberculosis. While the route of invasion is most common through the lymphatics, the virus reaching the mesenteric glands and thence spreading to the peritoneum, undoubtedly the ulcerative lesions of the intestinal tract often provide direct access to the peritoneum. Many pathologists assert that infection may take place through the intestinal coats without any recognizable *atrium*.

Peritoneal tuberculosis commonly presents itself independent of lesions of the thoracic organs or remote lymphatic glands. The tubercle bacillus has no saprophytic qualifications; it does not destroy primarily the tissues it invades; it is the secondary pyogenic changes which are destructive. It has been shown by Adami and others that leucocytes appear upon the surface of the upper intestinal tract and carry bacilli into the lymphatic glands and destroy them when in limited numbers. It is also accepted teaching, based both upon bacteriologic studies and clinical observations that pathologic bacteria are carried through the portal circulation of the liver and eliminated with the bile, thus providing a common means of infecting the gall-bladder and ducts. With these facts, now well established, it is apparent that primary infection of the peritoneum may obtain directly and also through lymphatic and venous channels. Certain structures within the peritoneal envelope have a marked susceptibility to tubercular infection. I have already mentioned the clinical fact that peritoneal tuberculosis is about twice as frequent in women as in men, a fact due to the susceptibility of the fallopian tubes to the disease. Every gynecological surgeon has been impressed with the affinity exhibited by these structures for Koch's bacilli. Some years ago Whitridge Williams demon-

* Read before the Kentucky State Medical Association, Owensboro, Ky., October, 1906.

strated that many cases of salpingitis, apparently of ordinary pyogenic origin, were shown by bacteriologic examination to be tuberculosis. Tuberculosis of the vulva, vagina and uterus is rare, and usually occurs in girls prior to puberty and in women past the menopause. Tuberculosis of the fallopian tubes is very common and occurs during the child-bearing years.

The exceptional susceptibility of the tonsils to tuberculosis is generally recognized. The follicles of the tonsils correspond in structure with those of Peyer's glands in the intestine. The tonsils readily transmit tubercle bacilli to adjacent structures, and so doubtless do the corresponding intestinal follicles. The vermiform appendix has a histologic characteristic in common with the tonsils in that its lymphatic tissue lies open on the mucous membrane. Like the tonsil, the appendix has an affinity for the tubercle bacillus, and is a common focus of infection. The lower ileum and cecum are also localities of marked susceptibility as shown constantly on the operating table. The fallopian tubes, the appendix and the intestinal areas mentioned are the common foci of tuberculous invasion of the peritoneum.

Among the sources of infection, consideration must be given the ingestion of infected food materials. While Koch has negated the long accepted belief in infection from bovine sources, the researches of others tend to re-establish the fact that milk from tuberculous cows is a prolific source of infection in man. After a careful study of the researches made on both sides, I am convinced that tuberculosis is transmitted to the human subject in this way. My own observations clinically have impressed me with the greater prevalence of abdominal tuberculosis in the rural districts, where uncooked milk is an almost universal food.

The pathologic changes which obtain in the peritoneum when infected by Koch's bacilli are varied. An infected area may present discrete or confluent granulations, with abundant serous or sero-sanguineous effusion; or the granulations may be enclosed in the fibrous exudate of adhesive inflammation; or the site of established infection may present caseation and ulceration. The pathologic classification of this disease so generally observed, of ascitic, fibrous, and ulcerous forms, is based upon these prevailing features of the pathologic picture presented. All phases of the disease may, generally speaking, be classified under these three heads. A convenient clinical classification may be made of three classes—the acute (febrile), the sub-acute,

and chronic (afebrile).

The symptomatology of peritoneal tuberculosis is so varied that in the several stages and with divers local and systematic manifestations, the diagnosis is most difficult, and in some instances, impossible. This is especially true of cases other than those associated with pulmonary tuberculosis and other than those seen late where the history is available and advanced lesions afford characteristic clinical significance.

In very acute cases the onset of the disease may be so conspicuously marked by high temperature and acute abdominal pain as to be mistaken for appendicitis. Such pains-taking clinicians as Musser and Keen report such a case wherein abdominal section was done. Other similar cases have been reported. In sub-acute cases, the progress of the disease may be so insidious that fibrous deposits may be formed without disclosing the nature of the disease, and intestinal obstruction may be the first symptom presented to the medical attendant. In many instances the robust appearance of the patient may preclude any suspicion of latent tuberculosis, even when the disease has extended over a wide area of peritoneum.

I recall the case of a well nourished girl of eighteen, in which a boggy tumor in Douglas' space, accompanied with fever and peritoneal pain, led to a conditional diagnosis of ovarian dermoid cyst, with twisted pedicle. Abdominal section revealed extensive tuberculosis of peritoneum, with fibrous adhesions of the intestines and other viscera. The same lesions of varied degree may readily be mistaken for suppurative salpingitis, with associated pelvic peritonitis.

The extraordinary changes which the omentum undergoes in advanced stages of peritoneal tuberculosis may lead to an erroneous diagnosis of carcinoma. The omentum becomes contracted and irregularly thickened, and lies across the abdomen near the transverse colon as a solid mass. The omentum may present the same deceptive tumor mass, varying in size, in the lumbar and iliac regions. Occurring in advanced cases of the fibrous and ulcerative forms, and consequently associated with emaciation and general debility, the structure closely simulates a malignant neoplasm of the adjacent viscera.

Perhaps the most prolific source of diagnostic error exhibited by any form of the disease under consideration is that of sacculated adhesions associated with the ascitic type. The simulation here to ovarian cystoma is so complete, affording a repetition of all the classic signs, that the counterfeit almost defies detection. The late Mr. Greig Smith de-

clared that in certain cases of encysted dropsy from tuberculous peritonitis the differential diagnosis from ovarian cyst was altogether impracticable. Scarcely any experienced abdominal surgeon has escaped this error. Another source of error in diagnosis is due to the fact that peritoneal tuberculosis may be associated with a variety of other diseases, such as neoplasms and infections other than tuberculosis. The great difficulty of accurate diagnosis in the early stages of peritoneal tuberculosis places an insurmountable obstacle in the way of early treatment, especially as regards the utilization of those hygienic measures which are so efficient in arresting and curing tubercular infection in other parts of the organism. A positive diagnosis is rarely made in any stage of the disease before resort to abdominal section. I have endeavored faithfully to utilize the various diagnostic signs in my experience with this disease, and have been impressed with their total inadequacy in the early stages. The peritoneal thickening described by Edebohls, the brown discoloration of the skin mentioned by Osler, the vaulted abdomen, the doughy sensation on pressure, the intermittent temperature, etc., described by others, are not sufficiently pathognomonic to establish diagnosis. It is when the disease is so advanced that gross lesions simulate the familiar intra-peritoneal diseases, that the surgeon usually sees the patient, and then positive diagnosis as a rule, is established by operative intervention.

Medical treatment was advocated a few years since by Borchgrevink, whose teachings received the endorsement of the late Christian Fenger. Borchgrevink reported two almost equal series of cases; one series treated by abdominal section, the other by medical measures only. As a result of his observations he concluded that operative treatment is inferior to medical treatment. Opposed to these teachings is the overwhelming testimony of all surgeons who have reported upon the subject. The medical treatment consists in the open air life of the patient, with proper food and rest, and the usual anti-tuberculous remedies—creosote, iodine, etc.

The surgical treatment had its beginning in 1862, when Sir Spencer Wells, mistaking the encysted dropsy of tuberculous peritonitis for an ovarian cyst, opened the abdomen. He found the peritoneum studded throughout with myriads of miliary tubercles. To his astonishment, the patient survived the operation, and, in the latest edition of his book on Ovarian Tumors, he reports the patient to be in vigorous health nineteen years afterward. It was in 1884, however, that König urged resort to abdominal section as a therapeutic

measure; and in 1889 he reported 131 cases collected from his own practice and from the literature. In 1887 I had for the third abdominal section of my personal experience the case of a middle-aged woman, who was supposed to have an ovarian cyst. When the abdomen was opened, the same pathology described by Sir Spencer Wells lay before me. My patient made a good recovery, and twelve years later I received the assurance of her uninterrupted good health.

To what this result is due has never been satisfactorily explained. Winckel attributes the cure to evacuation of some toxic principle. Gatti and Hildebrandt believed the cure is brought about by post-operative hyperemia and effusion of serum which has bactericidal properties, and thus the bacilli are inhibited or destroyed. Others have attributed the wonderful results of simple abdominal section to the admission of air and light to the diseased peritoneum. Many have advocated the application of iodoform and other germicidal agents to the serous surface, but apparently with no special improvement over the results following simple section and evacuation of fluid.

It is well known, from post-mortem investigations, that in many cases of peritoneal tuberculosis, as in tuberculosis elsewhere, spontaneous cure takes place. Is it not probable that in a large proportion of the cases of the ascitic variety of the disease, abdominal section may evacuate the debris remaining after Nature's successful contest, and by relieving tension and restoring normal contact aid in the cure? The explanation which most accords with the teachings of bacteriology is that of Hildebrandt and Veit, that when the accumulated serum is evacuated suddenly, it is replaced by serum possessing bactericidal properties.

However varied may be the theories offered in explanation, the clinical fact that cure follows abdominal section in a large proportion of cases is unquestionable. The percentage of cures after abdominal section, as given by various surgeons, is from 25 to 80 per cent. With proper selection of cases, and especially by extending the surgical procedure in a way to be mentioned presently, it is reasonable to expect the post-operative results to reach 75 per cent. of cures.

In 1903, J. B. Murphy made an able contribution to our knowledge of the disease under consideration. His exhaustive paper is based upon a series of experimental investigations on monkeys, and an extensive clinical experience in the treatment of tuberculous peritonitis. This able surgeon showed by repeated observations that in the ascitic form

of the disease the open fallopian tube is almost invariably found to be the constituent focus of infection. He made the important suggestion that the surgical treatment should, whenever practicable, consist in removal of the focus of infection in addition to the evacuation of fluid. W. J. Mayo has applied this suggestion in numerous cases, and states that in repeated instances where simple section and evacuation of fluid had failed, permanent cure was effected by secondary operation with removal of the infecting focus, which is most frequently the fallopian tubes.

Murphy concludes from his studies that the cure by operation is effected by the subsequent inflammatory reaction with its cell proliferation, which encapsulates the tuberculous foci on the serous surface.

Surgery attains its best results in the disseminated serous form of the disease. It is of comparatively limited scope in the fibrous and ulcerous varieties. In the operation the first purpose is to remove the products of the tuberculous process; second, to remove the focus of infection, and third, to prevent additional (mixed) infection. This last purpose provides a contra-indication for drainage. The marked tendency to incurable fecal fistula is an additional contra-indication to drainage.

For obvious reasons, operations should be done after, rather than during, the acute stage of the disease. The operation technically should consist, in women, of the median incision; the Trendelenburg position; evacuation of fluids and cleansing the peritoneum; packing off with gauze in the usual manner, and the removal of the fallopian tubes or other foci of infection whenever practicable. The most delicate and careful manipulation should be observed in order to avoid injury to the intestinal coats. In males the incision should preferably be made to the right of the median line so as to afford ready access to the appendix and ileocecal structures.

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DISCUSSION

Dr. William H. Wathen, Louisville: I do not know that I can add much to the very exhaustive paper presented by Dr. McMurtry. He has covered the subject very thoroughly, and his extensive experience enables him to present the subject to us from a practical standpoint.

It has been my good fortune, as well as my misfortune, to have had a comparatively large experience in the surgical treatment of tubercular infections in the peritoneal cavity, both the ascitic form, where the tuberculous disease seems to involve all of the intestinal peritoneum as well as the peritoneum lining the wall of the ab-

domen, where there are no adhesions and no local infection as the cause of the general infection that could be detected; likewise these forms of fibrous and adhesive involvement where the intestines were matted together, and where there was not a particle of fluid, the peritoneal cavity being perfectly dry. I have also seen the ulcerative forms where there are adhesions and often pus formation.

What I want to impress on you is the fact that when we are suspicious, when we believe from a very careful examination that there is any tubercular involvement in the abdominal cavity, let it be one of any of the three forms I have mentioned, the correct treatment is the exploratory incision, and the sooner this is done the greater will be the success. Nearly all these cases if delayed until there is extensive invasion will either die from the operation or they will not be cured of the disease.

In the ascitic form some of the most sanguine operators claim fifty per cent. of successes. It is likewise claimed that without operation there are from 25 to 30 per cent. of successes, but we must recollect the fact that when there is no operation performed there might have been a mistaken diagnosis. I have operated on cases of the ascitic variety where the trouble has not returned. I have operated on others where it did return and the patient went on to death.

As to the fibrous adhesive form. Just what should be done has not been definitely settled. If we open the abdomen and do nothing the patient is not benefitted. It is generally conceded that the adhesions should not be separated, but I believe that if in most of these cases we will make an extensive examination we will find a local condition that can be removed; either in the tubes or in the appendix; possibly in the bowel itself, when a resection may be made. In these cases if we will remove this local condition the patient will not only usually recover from the operation, but also from the disease. I am not certain in my own mind whether it is not better to separate the adhesions where you have a primary local infection that may be removed.

Dr. Joseph Walsh, Philadelphia, Pa.: It is a great pleasure to see how much is being done for what was for a long time thought to be an incurable form of tuberculosis. My principal experience with abdominal tuberculosis has been at the autopsy table. Here I have been surprised to learn that about 90 per cent. of cases of tuberculosis of the lungs show tuberculosis of the appendix. Occurring in connection with such a large percentage of cases that come to autopsy, I would not be surprised to learn that tuberculous appendicitis is not uncommon in early cases of tuberculosis of the lungs.

The only form of surgical tuberculosis with which I ordinarily come in contact is tuberculous

adenitis. The common question I have to answer is whether or not the lung condition will warrant the removal of these glands. With a small lesion in the lungs and the glands very large or painful I make no objection to the operation if chloroform is used as an anesthetic. Ether appears to be extremely irritating to the lungs, especially in tuberculosis of the lungs; while chloroform appears actually to have a curative influence. As a general rule, therefore, I believe it wise to insist on chloroform in all operations when tuberculosis of the lungs is even suspected.

Dr. Louis Frank, Louisville: I have listened to Dr. McMurtry's paper with a great deal of interest because not only is tuberculosis a subject of general interest at this time, but because in this anatomic region we have a lesion which for some twenty years, at least, has been considered incurable. My experience has not been so extensive as Dr. McMurtry's, but I have been exceedingly fortunate in the class of cases I have had. Among these cases, extending over a period of some ten years, I think there has been only one death. This was a case of tuberculosis of the peritoneum in which the primary infection was in the liver, the peritoneal surface of the liver being involved. The operation was done, and when I saw the condition I closed the wound at once. Death ensued from general peritoneal tuberculosis. There was no ulceration or breaking down anywhere else; no lesion outside of the peritoneal cavity. Death took place about five or six months after the operation. This is the only death I have had among twelve or fifteen cases.

In several of these cases the operation was done primarily for appendicitis, in one case seen very recently, I operated for appendicitis, tubercular in character finding general tuberculous infection in the peritoneal cavity.

I think that many of these cases in women are without doubt due to infection through the Fallopian tubes, even when the lesion is not primarily located on the peritoneal aspect of the tubes themselves. A case of this kind, in which only one tube was removed, has recovered, and she has since then borne two children. I am sure that where we have an extensive infection of the uterus or in the uterine adnexa that a hysterectomy, a complete removal, is the only correct method of procedure.

I believe that the most important thing in connection with this subject is not the treatment because on that we are all agreed, but it is the question of diagnosis. I believe that in most of these cases the operation is done without the condition being suspected. I am convinced of that. The surgeon should always bear in mind, especially in obscure abdominal affections, that the case might be one of tuberculosis. A case recently under observation and operated on enabled me to

make a diagnosis in a case I have now in which thus far no operation has been done.

Possibly some of these cases are amenable to treatment other than that which is surgical. At the earnest solicitation of Dr. Carl Weidner, of Louisville, euromphen injections were recently employed with marked benefit. I am sure it is a valuable agent. *

Dr. J. Garland Sherrill, Louisville: I agree with Dr. Frank as to the question of diagnosis. It is important, especially the early diagnosis. We certainly ought to be able to make a diagnosis in these cases better now than we were formerly. Personally I am sure that I can do this better now than I could in my early experiences with these cases. We can make a more accurate diagnosis as to the condition in the abdomen, and having made such a diagnosis we are better able to judge before the abdomen is opened as to the plan of treatment, and whether or not an operation is indicated.

These cases, in many instances, complain of very little pain. In some instances the patient complains of a pain in the region of the appendix, pain of a mild type; not an acute appendicitis, but a pain and tenderness in the region of the appendix, and this pain is persistent, not rarely clearing up. Again we have patients complaining of pain and tenderness in the region of the uterine adnexa. There is not a sharp pain nor any evidence of an acute infection. When there is an infection of the adnexa we can determine by bimanual palpation a boggiess in the cul-de-sac and in either broad ligament. These symptoms certainly are sufficient to justify an exploration, especially if the patient has an evening rise of temperature and is losing in flesh, two very important symptoms not mentioned. In these early cases we will be able to remove any lesion that may be found on opening the abdomen.

Along with these symptoms, in case the infection is through the intestines and not through the appendix or the uterine adnexa, we will find a doughy feeling imparted to the abdomen on palpation, which increases more and more as adhesions form in the peritoneal cavity. If this doughiness is marked, without the formation of any fluid, the wisest course to pursue is not to open the abdomen. Keep out of it. If instead of this doughy feel we can recognize fluid free in the peritoneal cavity, that is, free ascites due to tuberculosis, having differentiated between cirrhosis of the liver and other conditions which produce ascites, we had then best advise our patient to submit to an operation because these cases give us the best results of any form of tuberculosis of the peritoneum. If, however, this fluid is circumscribed, we can, in many of these cases, obtain

*Looking over my records since this discussion, I find four deaths instead of one, as above stated.

good results. In others we will find the results not so good. Therefore before we open the abdomen we had best tell the patient or his family that the prospects for a cure are not so good, but that there is a chance.

When you have the marked fibrous form showing adhesions or a fibrinous peritonitis, the best thing to do is to remain out of the abdomen, unless the patient is suffering from symptoms of obstruction of the bowel.

If you find two or three coils of intestine matted together in a small space, it is feasible to remove the entire focus. The best plan of treatment in such a case, one that can be carried out easily and quickly, is resection of the gut and an end to end anastomosis of the bowel.

Dr. McMurtry, closing the discussion: The statement made by Dr. Walsh is very important speaking, as he does, from the medical and the pathological side of the question. He tells us that in a very large proportion of cases of tuberculous peritonitis that go to their death and reach the postmortem table he has found the appendix involved, which confirms very strongly the increasing experience of abdominal surgeons who find that many cases of appendicitis that hitherto were regarded as cases of simple pyogenic infection with the colon bacillus, on more careful examination of the specimen are found to be due to the tubercle bacillus.

In many cases of appendicitis, where the appendix is removed and thrown aside and the case is classified as an ordinary case of appendicitis, a careful microscopic and bacteriologic examination would disclose the fact that a large proportion of these cases are tuberculous in character. Here we have a primary focus of infection, and we know what a large proportion of these cases recover when the appendix is removed early. That is an important confirmation of the observation made by surgeons as to the appendix as a focus of infection.

Dr. Frank's observation, that we should strive for improvement in diagnosis is important. I am satisfied that by close study, familiarizing ourselves with the clinical conditions of the abdomen, we will be able to make a diagnosis in a great many cases earlier than has hitherto been done. I now have a patient in bed ill with tuberculous peritonitis. Hitherto these cases were mistaken for cases of cystic or solid tumors, or for some other affection. Tuberculosis was not suspected until the abdomen was opened. We must strive to make our diagnosis early, then open the abdomen, remove the focus of infection and thus get results from early surgical treatment.

As to what Dr. Sherrill said regarding the surgical procedure, I wish to give my most cordial endorsement, and say to those who do this work

that it is very important not to do too much. When you find the intestines all matted together, bear in mind that nature has matted them together as a matter of protection. Also bear in mind that in tuberculous invasion these structures are very prone to ulcerative changes. They are very friable and with much manipulation you are almost sure to have a fecal fistula and this will rarely ever heal. It is very difficult to close a fistula in a tuberculous bowel.

There is just one other suggestion, that these cases are greatly improved by surgery. If the abdominal condition is complicated by moderate degree of tubercular invasion of other organs, they are greatly improved by opening the abdomen and evacuating the fluid. Bear in mind that the operation itself carries with it very little danger.

I was glad that Dr. Walsh made the suggestion, which is generally observed by surgeons, that where there is any pulmonary complication, chloroform should always be used as the anesthetic of choice.

In cases of tuberculous invasion of the peritoneum there is practically no mortality from opening of the abdomen. It is less than one per cent. The operation may enable us to rescue the patient, whereas otherwise we may remain in doubt as to the exact nature of the disease and its appropriate treatment.

THE PROTECTION OF THE INNOCENT FROM VENEREAL INFECTION AND PROSTITUTION.*

FRANK M. STITES, HOPKINSVILLE, KY.

It is well to bear in mind in discussing venereal diseases and prostitution that the protection of the innocent and the restraint of the vicious are distinct problems. But they must be closely connected and the one does involve the other to a certain degree. The innocent can be warned and advised, but cannot be restrained by law or force from seeking vice. The vicious will not under ordinary circumstances heed advice or warning, but they can by the enforcement of law be restrained from injuring the innocent.

Vice cannot in this age be utterly annihilated and the vicious can always find some way to practice vice among themselves. The most that can be done with this class is to rescue those that are willing to be rescued, to prevent recruiting as far as possible and to limit the activity of the vicious in society and make their contact with the innocent difficult.

The fact that prostitution cannot be en-

* Read before the Christian County Medical Society, January 21, 1907.

tirely checked and venereal diseases completely eradicated from society need not discourage anyone who is striving in this direction. The most stringent enforcement of good laws against murder and theft has never succeeded in entirely preventing their perpetration and yet no sane man would advocate the repeal of such laws for that reason or would think of suggesting a change to a license system for murder and theft where a limited class would be allowed to kill and steal in a restricted territory under police supervision.

While assassins kill and maim their hundreds and thieves steal many things of value in spite of the law and penalties, venereal diseases are killing and maiming thousands of innocent and defenseless women and children, and prostitutes male and female are robbing our girls and boys of virtue and manhood, health and honor, hope and happiness, with practically no restraint or even recognition in law.

Measles, scarlet fever, diphtheria, tuberculosis and the other contagious diseases are recognized by law in almost every civilized community and the most rigid rules are enforced to prevent their spread, yet none of these, possibly excepting measles, are so widespread or so certainly contagious as gonorrhoea and not even tuberculosis destroys life and health more extensively than this disease.

It would be sufficiently horrifying if venereal diseases could be confined only to male and female prostitutes who deliberately choose that life, but when we know that thousands of innocent women and children every year either die or are maimed for life by these diseases, it is unspeakably criminal that society, and especially the medical profession, should remain passive and do nothing to restrain the vicious or warn the innocent of the great danger from this source.

Prindep Al Morrow (N. Y. Med. Journal, July 4th, 1903) says: "It is no exaggeration to state that every year in this country thousands of young innocent women are infected by their husbands who in many cases do not dream that they carry to the marriage bed the germs of a disease destined to wreck the health or lives of their partners. These women are condemned to invalidism, to various inflammatory disorders of the pelvic organs, to sterility, to castration, by the act of men who have vowed to love, protect and cherish them. It is not because men are so lacking in conscience and sensibility that they perpetrate these crimes; it is largely from ignorance and lack of knowledge as to the nature and danger of gonorrhoeal infection, for which the medical profession is largely re-

sponsible. After all, the views of the laity upon medical subjects are but the reflected opinions of the medical profession. The time is not long past when the existence of an intermittent gleet was not thought to be an obstacle to marriage. Many physicians were accustomed to recommend what was called 'the sexual hygiene of married life' as the best cure for these intermittent discharges. It is not surprising that the laity are unsuspicious of the pathogenic significance or the potentiality for mischief of a disease which the physician regarded as practically cured."—"It is estimated that from 10 to 20 per cent. of all blindness is caused by gonorrhoeic infection. Of all cases of blindness, purulent conjunctivitis is the most powerful factor. According to Neisser there are in Germany, at the present time, 30,000 blind, whose loss of sight is due to gonorrhoeal ophthalmia. In many institutions for the blind, no fewer than 60 per cent. of the inmates have lost their sight from gonorrhoeal infection. In the institutions of Paris, the percentage is estimated at 46; in Switzerland, 20; in Breslau, 13; in this country from 25 to 50."—"The occurrence of purulent ophthalmia in the new-born may be accepted as proof positive of the infection of the mother."

Dr. Knopf, of New York, in an address (Med. Rec. June 2, 1906) quoting Kober, says, concerning the sterility following gonorrhoeal infection, "The destructive effects of gonorrhoea on the procreative functions have been very properly emphasized in connection with the race suicide problem and are certainly startling when we are told that 50 per cent. of all involuntary childless marriages are due to this cause. From what has been said thus far on the subject of venereal disease, you will agree with me when I say that the loss to a country which must result from the expense of caring for the blind whose condition is due to gonorrhoeal infection, the idiotic, degenerate or pauper due to syphilitic parentage or direct syphilitic acquisition and from supporting the acute and chronically afflicted during the time he is incapable of work is well-nigh incalculable."

F. C. Valentine, of New York, (Jour. A. M. A. July 4, 1903) states that "Many important books have been written and many valuable papers contributed to medical journals on the dangers of venereal diseases. All show that venereal diseases are more perilous to the individual, the family and the State than all other ailments combined."—"That of all women who die of diseases of the reproductive organs, 86 per cent. are victims of gonorrhoea, of which their husbands imagined

themselves cured."

The effects of syphilis are so well known to the profession and its results so manifest to the world that it is hardly necessary to discuss this disease. It is responsible for the death of many innocent children and the destruction of the physical and mental health of many more, to say nothing of its effect on the mothers. Its results are transmitted to succeeding generations, often as hereditary syphilis, more often as insanity, epilepsy, inebriety or criminal degeneracy.

Morrow (N. Y. Med. Jour. June 27, 1903) compares syphilis and gonorrhoea as follows: "Unquestionably the most sombre chapter of syphilis insontium is the murderous influence of the disease upon the offspring, but the no less pernicious effects of gonorrhoea upon the procreative function, its inhibitory influence upon the perpetuation of the species, which is the primary and fundamental basis of the institution of marriage, are by no means adequately appreciated.

Syphilis destroys the product of conception or blights its growth and normal development. Gonorrhoea is more radical and effective in its action, it renders null and void the procreative process by mechanical obstruction of the seminiferous tubes or oviducts or by rendering sterile or unproductive the culture field of the ovum. Gonorrhoea absolutely prevents what syphilis maims or destroys."—"We are accustomed to look upon syphilis as the most active cause of depopulation, but gonorrhoea is the much more powerful factor. Janet, in discussing 'social defense against the venereal peril' recently (1902) declared that gonorrhoea with tuberculosis, perhaps more than tuberculosis, is the great pest of our age. If we compare from a social point of view the importance of gonorrhoea with that of syphilis, gonorrhoea is to syphilis as 100 is to 1, not only from the standpoint of the number of persons attacked, but also from the standpoint of the gravity of the lesions and their perpetuity. Gonorrhoea modifies in a manner, often permanent, the genital organs of patients, renders them infinitely dangerous for the women they approach, causes all the metritides and adnexial inflammations which today give to the surgeons three-quarters of their work, and conducts finally both men and women to sterility."

E. H. Grandin, of New York, (Med. Rec. May 26, 1906) says in a paper on "Gonorrhoeal infection In Women" read before the Academy of Medicine, "It may be that I shall speak emphatically, possibly dogmatically, but if so it is from strong conviction, the result of seeing scores of homes wrecked by

this germ, the result of contact with scores of women weeping for the children they could not have—not knowing why, the result of the knowledge that fully 60 per cent. of my operative work among women would not exist were it not for this germ."—"It may be maintained that there is no germ of more malevolent nature, or harder to kill. It spreads to every organ of the body, affecting in particular mucous surfaces, and, like the polar bear, hibernates, so to speak, awakening and becoming active after years of slumber. Even the virulent streptococcus is kinder, for if it does not kill, it disappears from the organism. In women, owing to the peculiar anatomical structure of the uterus, it lies dormant under the mucous membrane to become active under sexual congestion, possibly, or during the puerperium. Once the germ has extended above the internal os, I think I may state without fear of contradiction, it cannot be eradicated, and thence it is a simple step through mucous continuity to fallopian tube; to ovary, to pelvic peritoneum. There results endometrial inflammation, salpingitis, oöphoritis, pelvic peritonitis, with their sequelae—sterility and the operating room."—"To bring the matter home to you, it has been estimated that 75 per cent. of males have had gonorrhoea once at least, and fully 30 per cent. carry the latent germs to the nuptial couch. About 45 per cent. of sterile marriages are due to the gonococcus. About 60 per cent. of pelvic inflammatory diseases requiring operative interference is due to the gonococcus. Lastly, about 30 per cent. of blindness is traceable to this arch enemy of mankind. These statistics are obtained by reports made by many observers. Is it a wonder, therefore, that the gonococcus holds rank scarcely second to the tubercle germ? And yet witness the activity characteristic of the crusade against the latter, and the criminal apathy displayed where the former is concerned. The saddest part of the rôle played by the gonococcus is that it effects the innocent—the woman and the child."—"Let a vessel bearing cholera anchor off this port, let a few cases of yellow fever or of smallpox develop in this community, and great is the alarm. And yet in this community a fouler, a deadlier, a more insidious disease exists which rarely kills of itself, but maims the innocent, and the public is indifferent. And how does this disease spread? Your answer is through prostitution largely, and I am in agreement with you, only I wish you to remember that it is *man* the prostitute rather than *woman* the prostitute, who spreads it."

Page after page of such quotations could

be compiled until volumes would accumulate of the writings of our best men on this subject, and yet the great majority of the members of the medical profession are apparently indifferent. Is it any wonder then, that the laity are almost entirely ignorant of its great importance and indifferent to the great danger?

There has been an organization formed under the auspices of the A. M. A. called the "Society of Sanitary and Moral Prophylaxis" for the purpose of dealing with the problems connected with venereal disease and prostitution, and this society desires and should receive the hearty co-operation of the entire medical profession.

The questions connected with the subject of venereal prophylaxis are largely in the formative stage. Many suggestions have been made and many opinions offered, but all are agreed that the education of the public on the subject of venereal diseases and sexual hygiene is essential in the very beginning. The means suggested for the dissemination of this information are the newspaper, the pulpit, the school and college, the family physician, public addresses and instruction by the parents in the home. The restraint of prostitution in some form is also advocated by nearly all writers.

I can only very briefly touch on the various channels of information that have been advocated, and offer some suggestions based on personal experience and observation.

For a time it was hoped that licensed and inspected female prostitutes would solve all problems. France, England, Russia and other European countries attempted this plan in various ways, but after many years of trial it is practically the unanimous verdict that this method of dealing with the problem is worse than a failure, though it is still nominally in force in some countries. That it was doomed to failure might have been known from the start, *for crime can never be licensed*. The scientific explanations of the failure of this plan, however, are sufficiently convincing. In the first place it leaves out of consideration the part of the man in the spread of venereal diseases. No feasible plan has been suggested for the inspection or restraint of the male prostitute. It is stated also by the highest authorities that when the infection of gonorrhoea in women extends above the cervix, it is difficult of detection even under the most rigid examination, as well as impossible of cure. It is claimed by experts that it requires many examinations extending over several weeks to be able positively to pronounce a woman free from gonorrhoeal infection. The fact is, that the examinations

made of licensed prostitutes, at best, can be but superficial and amount to very little in protecting men against infection by them. Even if a thorough inspection of the female were possible it would still be very easy for her to infect many men between the time of her inoculation and the first manifestation of the disease. One man might leave her sufficiently inoculated to infect every man who approached her that night.

Licensing and inspecting have been attempted in this country in certain large cities. Cincinnati has tried this plan and I quote from M. L. Heidingsfeld (Jour. A. M. A. Jan. 4, 1904) who writes from that city after careful study of the working of this plan. He says, "If the system was simply ineffectual and powerless to show positive results, I, for one, would not endeavor to criticize it unfavorably or invoke its just condemnation. Sincere as is my belief from a thoroughly distinterested and unselfish standpoint, that it is powerless and impotent to materially prevent the spread of venereal diseases, I am doubly assured that its influences in other directions are decidedly pernicious and it effects material harm.

"Control, with periodic examinations, gives to the laity a false sense of security. There is no more powerful conservator of social purity, I believe, than the fear of impending danger to the transgressor, the fear of contracting a venereal disease; this fear is materially minimized by the assurance of the periodical examinations made for the purpose of determining the absence of infectious diseases" — "It is generally conceded by most authorities, Blaschko, Jadassohn, Neisser and others, that one-half to one-third of the prostitutes, even in controlled cities, are constantly infected with gonorrhoea, and that at least 80 per cent. of them are infected with syphilis during their first year in that life. Havas states that after the gonococcus has passed the cervix and reaches the adnexa, the disease is incurable and the prostitute becomes a source of constant infection. In the light of these facts, it is certainly farcical, I may dare say criminal, to grant this highly contagious class of individuals a certificate, with the injunction that it be prominently displayed, reading that "We have made careful examination of ———— and find her free from any venereal or contagious disease." — "So evident are the shortcomings of most of the control measures that some of the leading authorities on venereal diseases, both at home and abroad, I need only mention Neisser of Breslau and Blaschko of Berlin (who have pursued with keen interest, under favored conditions, the work accomplished in

this direction) are exerting their powerful influence to oppose these measures because, from a personal, disinterested and unselfish standpoint, regarding them as harmful, pernicious and inefficient. Valentine, of New York, states that the staunchest advocates of registration and periodical examinations of prostitutes must admit that the dissemination of venereal diseases is thereby but feebly combated. In Paris, which has had a century of unsuccessful experience, the controlled prostitutes number only 4,700, and are rapidly diminishing in number, while the clandestine number conservatively 10,000 and are rapidly increasing." "Stelwagon, of Philadelphia, states, "We will never make headway in the control of venereal diseases by legalizing prostitution or recognizing it as a legitimate calling." Gottheil, of New York, says, "Municipal regulation, as practiced in many of the European cities is neither successful or desirable." Heidingsfeld further states that in Cincinnati there were only 500 registered prostitutes subject to inspection and at the same time he estimates at least 10,000 clandestine were then in that city. Blackmail and graft are inseparable from this system. So far as I know none of those of high repute who are engaged in the study of these problems in this country seriously advocate the licensing of prostitution.

The instruction of the young in sexual hygiene by the teachers in the public schools is a very doubtful procedure and in my opinion would do far more harm than good. It would of course be necessary to first instruct the teachers on this subject in the normal schools and even then there would be few teachers who would be competent to give instruction to the young on so important and difficult a subject as sexual hygiene. Besides, in every public school there are a number of sexual degenerates who could take the little information given and pervert it and disseminate the perverted teaching in the school undoing much or all of the good done to others. Few parents would consent to such instruction of their children. These and other drawbacks would limit such teaching in the school to a very few teachers and those with whom such instruction could be with safety imparted would have to be selected with care. Teachers can do great good, however, when they are fully informed on this subject by a more careful watch over the children in their rooms and by co-operation with the parents in private instruction in suitable cases.

It requires great courage for the minister to speak on this subject from the pulpit, for it is exceedingly difficult to say the right thing in the right way and only a very few have

the necessary tact and ability to speak on this subject at all. Only those who are fully qualified should attempt it. Most ministers can do the greatest good by preaching the Gospel in its simplicity—the only sure antidote for this and all other vice.

It would help greatly if the columns of the newspapers could be opened to the carefully selected writings of a committee appointed for this special work by each State Medical Association. Public addresses by competent men might do some good.

The family physician has unlimited opportunities in this campaign of education. He can go where even the minister of the Gospel is not admitted. He can speak plainly where the lips of others are sealed. His words of advice may be listened to and heeded by some who do not even fear God. He has, besides, the requisite knowledge of the subject and must rise to his opportunity and speak and act without fear. But after all, the divine plan is the best and safest when it comes to the children themselves, and no substitute can ever take its place. The fathers and mothers of the homes must instruct their own children. The parents of this generation have grown up in woeful ignorance of the sexual function and of sexual hygiene and they are the ones that now need to be most carefully instructed. Ministers, physicians and teachers can instruct the parents and when opportunity offers assist in the instruction of the young of both sexes. In the colleges, classes may be formed for the instruction in sexual hygiene, as has already been done in some of our larger institutions. All normal schools should see that those going out to teach the young have a sufficient knowledge of this subject to be on their guard and deal with the problems as they arise in their work as teachers.

It is exceedingly difficult to make any rules as to what and how much to teach the young in sexual matters. Those who are competent to give instruction must also be competent to apply the instructions to individual cases. Girls may be taught by illustrations from nature what reproduction is and instructed in the sacredness and importance of the human race of this function. They should be fully warned as they approach maturity of the prevalence of venereal diseases among men and their great danger from this source. Thorough moral training by their parents and teachers will give them the greatest protection with a very limited knowledge in other directions. They should be taught to expect and require in men the same sexual purity that is required of them.

The teaching of boys is a far more difficult,

but infinitely more important problem. They should receive instruction in the physiology and hygiene of the sexual organs in such a way as to leave the impression of the importance of the sexual functions and not to arouse idle curiosity. They should be warned against the practice of perverted and degenerate boys and be shown the moral wrong as well as the pathology of such practices. Something of the object of the Creator in providing for the perpetuation of the race should be explained. The danger of venereal diseases not only to themselves, but to innocent women and children, must be impressed upon them before they are allowed the freedom that naturally comes to them as they approach manhood. But I would most strongly emphasize the great importance of teaching all boys and young men that sexual continence and purity, is not only possible for men, but that in it lies their only safety—physical and moral. Practically all of the best authorities agree that sexual continence in the male does not cause the loss or even the diminution of the power to procreate and it is very encouraging to see the unanimity of the best medical advice obtainable on this question. The following is a synopsis of the remarks of C. H. Cook, of Massachusetts, in a discussion of a symposium on this subject at the last meeting of the A. M. A. (Jour. A. M. A. Dec. 8, 1906.) He said: In reference to the statement that physicians are oftentimes responsible for teaching young men that sexual relations, even before marriage, are necessary to health, that whenever a man consults him and makes that claim, he tells him that if the sexual relation is necessary to health, or physiologically necessary, it cannot then be morally wrong; neither can it be wrong to the woman who ministers to that need. That granting for the sake of illustration or argument that such relation is necessary to health, God Almighty did not make anything that was necessary and at the same time morally wrong; neither did the Almighty make anything that was physiologically necessary for a man and therefore not morally wrong, and at the same time wrong for the woman who ministers to that need. He thinks physicians should press that home on every one who makes such a claim, be he physician or layman. Although men claim liberty for themselves, Dr. Cook says that he has yet to meet the man who will grant that liberty to his wife, his daughter or his sister. It would be well to place the matter in this light and such an argument is unanswerable.

In spite of all instruction, warning and advice to the young, however, if they are

allowed to freely associate with the vicious or degenerate they will be sure sooner or later to fall and it is the duty of parents and teachers to carefully watch the companions of children and protect them from evil associates.

The effect of evil thoughts aroused by obscene literature and illustrations, many theatrical performances and promiscuous dancing, cannot be overlooked and it will be very difficult, if at all possible, to eliminate these sources of contamination of the young. Only when society recognizes the evil results more fully and demands repression, can any hope be entertained in this direction.

The state may assist in preventing the spread of venereal diseases by recognizing their existence. Some States as Indiana and Michigan have already passed laws requiring a certificate of health (which includes freedom from venereal infection) before a marriage license can be obtained. Regardless of what may be said of the difficulty of enforcing such a law and the ease with which it may be evaded its enactment by all the States would be educational and would result in great good by the mere legal recognition of the existence of such diseases. Sooner or later it will come to the enactment of a law requiring a report to the boards of health of all cases of venereal diseases, just as the less serious contagious diseases are now reported.

Concluding, let me insist that the speediest way to secure the protection of the innocent women, as well as the young of both sexes, from these terrible diseases is to obtain the intelligent co-operation of the whole people by telling them the plain truth on this subject. No advance is permanent or possible without the intelligent co-operation of the people themselves.

Then we can hope for the enforcement of existing laws forbidding open prostitution and flagrant advertising of this illicit calling. Then when the laws that already exist are enforced for the protection of women they will not be led or forced into this life so easily. But above all, when men are restrained by moral force, by law and by fear of the physical injury to themselves and innocent women and children, the occasion which now exists will be removed and the temptation to women to enter the life of prostitution will be very largely taken away.

GONORRHOEA UP TO DATE.*

By J. T. WINDELL, Louisville, Ky.

Gonorrhoea, the first disease of which we

*Read before the Kentucky State Medical Association, Owensboro, October 11, 1907.

have record, has most likely existed as long as the human race. At all events, inflammatory disease of the genitalia attended with discharges of pus and mucus can be traced back historically almost as far as the history of man.

The cultivated nations of antiquity as well as of the middle ages seem to have understood to some extent at least the etiology of this disease, the contagious character of it was well known and laws were enacted to prevent its spread.

Probably the first prophylactic laws of which we have a record are those embodied in the 15th chapter of Leviticus, which were formulated, in the opinion of most writers on genito-urinary diseases, to control prostitution and prevent gonorrhoea.

It has been contended that the disease referred to in this chapter of the Bible was simple urethritis and not the specific inflammation of the present day, yet the disease was evidently a very contagious one, attended by a discharge of pus from the genital organs, and was therefore practically the same as we know it at the present time.

The advent of syphilis coincidentally with the discovery of America led to much confusion as to concise knowledge of gonorrhoea as its relatively mild symptoms as a venereal disease were completely overshadowed by the severe and often fatal ones of syphilis and the fallacy that soon became prominently advocated that they were one and the same disease or at least caused by the same virus, was responsible for gonorrhoea to sink into oblivion from a scientific standpoint.

For several centuries gonorrhoea was regarded as a symptom of syphilis and was treated as such. Mercury, Sarsaparilla, systems of dieting, bathing and blood letting, blistering and all sorts of heroic measures were inaugurated to cure the clap.

It was not until the latter part of the eighteenth century that experiments were made in a scientific manner to completely separate the gonorrhoea and syphilis poison, and had it not been for the unfortunate experiment of John Hunter, who inoculated himself with gonorrhoeal pus and thereby introduced into his system unmistakable syphilis, the question would have been settled sooner.

Benj. Bell, who published a treatise on gonorrhoea and syphilis in 1795, was the first who secured a hearing for his opposing views as to the unity of the two diseases, and advocated a separate line of treatment for each disease.

It remained for Ricord to settle the question and after a series of nearly 700 inocula-

tions extending over a period of eight years, he clearly demonstrated the non-identity of the poison of gonorrhoea and syphilis.

The true cause of this disease did not appear until, aided by the works of Pasteur, Klebs and Koch, Neisser, in 1879, discovered in the pus from gonorrhoea and the discharge from the eyes of those suffering from gonorrhoeal ophthalmia, an organism that was the specific cause of these diseases, and gave it the name it now bears, *Gonococcus*, and in all probability, permanently fixed the generic term gonorrhoea in its application to the specific type of inflammation affecting the mucus membrane in both male and female.

The introduction of a positive method of making pure cultures of this germ, by Wortheim in 1891 established the pathogenic character of the cause of gonorrhoea.

No further developments especially of a therapeutic character have followed, and although from time to time we hear of a serum for the treatment of this disease or one of its complications notably gonorrhoeal rheumatism, it is safe to say that a specific of a biological character will not be forthcoming for some time, if ever.

The antigonorrhoeal serum of Torrey appears to me of no value in acute or chronic gonorrhoea, but has given some surprisingly good results in gonorrhoeal rheumatism. Torrey has grown pure cultures of the gonococcus in a mixture of ascitic fluid and beef tea, and used rabbits for the production of the serum.

In the treatment of gonorrhoeal rheumatism by antigonococcic serum, the serum is injected into the subcutaneous tissue in the back of the patient's arm in doses of from 30 to 40 minims. The dose may be repeated on successive days according to the requirements of the case. The serum has little or no effect upon the urethritis, and so long as that disease exists recurrences of the articular complications may be looked for.

The importance of this disease both to the public and the physician has until recent years been greatly underestimated. Various reasons can be assigned for this; the improper knowledge of the disease held by all, many persons thinking that a cessation of the discharge meant the cure and end of the trouble, and as very simple remedies have often accomplished this, it is but natural that such views should exist.

The fact that it is prevalent for the most part in young men and prostitutes who have no altruistic tendencies, and that too often the statement of a doctor that it takes months instead of days to accomplish a cure is mistrusted. Again, it being a disease that is fos-

tered by prostitution, it is impossible to eradicate on account of our lax laws of public prophylaxis.

Medical literature in recent months has been conspicuous with a number of articles on this subject, and diseases that had always been charged to other causes have been laid to the door of the gonococcus. Enterocolitis, peritonitis, pyemia and numerous pains and inflammations, both in men and women, are shown to be due to gonorrhoeal metastasis.

Gonorrhoea, the most venereal of all venereal diseases, is the most wide-spread of all contagious diseases, with the possible exception of measles. One in twenty-eight of the patients treated in a New York dispensary presents a case of venereal disease, there being four times as many of gonorrhoea as syphilis.

Grandin in a paper recently read before the New York Academy of Medicine, stated; "there is a disease in this community which bodes greater ill to the families and to the State than even tuberculosis, and yet in public its name is shunned and even in executive circles it is even as though it did not exist. This disease is Gonorrhoea." The doctor further stated that his emphatic remarks were the result of seeing homes wrecked by the disease and women crying for the children they could not have and not knowing why, and that 60% of his operative work among women would not exist were it not for this disease.

Frank Clarke, of New York, before the Westchester County Medical Society, recently stated that: "to-day we recognize in gonorrhoea a formidable infection which has invaded practically every tissue of the human body, and from which no class of society is immune."

Noeggarth's statement made before the discovery of the gonococcus, that 80% of men living in large cities had gonorrhoea, and that a large proportion of them never recovered, and marrying transferred the trouble to their wives, was vehemently combated at that time by many and accepted by few, has in the light of recent literature on this subject again attracted attention, and the subject of latent gonorrhoea both in men and women is receiving much study and investigation from a therapeutic point of view. To-day, the consensus of opinion is that the dangers of gonorrhoea are vastly more than those of syphilis.

Our populous civilization with its enormous increase of wealth, making travel easy and economical, affording luxurious living for thousands, providing homes, hotels and apartments with unending conveniences, developing public pleasures that outrival those of an-

cient Rome in magnificence, and popular pleasure resorts that attract millions of people, together with the modern madness of women for personal adornment and devotion to style, and the ever-increasing consumption of intoxicating beverages, tend to increase prostitution and thereby spread gonorrhoea.

The complications of this disease in men are many and varied and are attended in the most part with extreme difficulties in their ultimate cure. Ballinitis, Bubo, Periurethral abscess, Phymosis, Periphymosis, Edema, Lymphangitis, Cowperitis, Folliculitis, Seminal Vesiculitis, Cystitis, Prostatitis, Epididymitis, Orchitis, Hemorrhage, Retention of urine, Vegetations, Pyelitis, Nephritis, Chordee, Pyemia, Gonorrhoeal Rheumatism, and Gonorrhoeal Ophthalmia often follow the introduction of the gonococcus into the urethra.

As those afflicted with this disease have been legions under all circumstances and environment, and for untold ages, of necessity the remedies that have been used would be countless. All manners of botanical and chemical combinations have been tried for the suppression of this inflammation. All manners of dieting, fasting, feasting, drinking and bathing, injections, poultices, clysters, blisters and blood letting. Countless numbers of mechanical contrivances, syringes, bougies, catheters and endoscopes have been invented and used. Experiment in the treatment of this disease has been painful if not profitable to the fullest extent and has eliminated from the many a few medicines and methods of virtue. The antibleorrhagics and urinary antiseptics in use at the present day are Oil of Santal, Copiaba, Cubebs, Turpentine, Boric Acid, Kava Kava, Pichi, Salol and the Ammonium Formaldehyde preparations.

Except for a few interesting works, the pharmacological investigations of the balsams remained far in arrear of their extended empirical use; and it is only recently that the well known secondary actions of these drugs have been eliminated to any extent without interfering with their useful therapeutic properties and chemical science has recently given us several remedies of this class the administration of which is not attended by gastritis, pain in the lumbar region, or albuminuria.

For the local treatment of gonorrhoea there has been the same multiplicity of remedies; acids and alkalies, vegetable and mineral astringents, copper, lead, zinc and silver salts have been used with varying success. Silver preparations seem to have more efficacy than all other injections, and are more popular at the present day. Many combinations have recently been put on the market as ideal substi-

tutes for Nitrate of Silver; in order of their introduction we have had Argentamine, Argonin, Protargol, Ichtagan, Collargolum and Argyrol, claims being made that they were more penetrating and less painful, but I hold with Taylor that when it is carefully used by a person of experience, Nitrate of Silver is the ideal agent in the treatment of gonorrhoea in nearly all stages.

For the application of injections and medicines to the urethra and bladder for the cure of gonorrhoea many devices have been used. Hand syringes, very similar to those employed at the present day, were used in the seventeenth century.

Keyes' modification of Guyon's syringe is the one instrument that has probably a greater field of usefulness in the treatment of chronic gonorrhoea than all others combined not excepting the very perfect endoscopes of the present day.

The hydrostatic irrigation method of Janet has been almost universally adopted and for efficient application of medicines to the urethra and bladder has no equal; solutions of Nitrate of Silver, Boric acid, and Permanganate of Potassium used by this method form a cheap and successful way of treating gonorrhoea.

To Fuller, of New York, must be given the credit of inaugurating a method of relieving cases of persistent urethral discharge due to gonorrhoeal invasion of the seminal vesicles and at the present day cases of this nature are speedily cured by the followers of his teachings.

BIBLIOGRAPHY.

Finger.—Gonorrhoea and Its Complications.
Keyes.—Surgical Diseases of Genito Urinary Organs.

E. R. Larned — Therapeutic Gazette, Sept. 1906.

Taylor.—Genito Urinary and Venereal Diseases.

New York Medical Record, May 9th, 1906.

H. Veith.

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DISCUSSION.

Dr. W. W. Anderson, Newport: I want to commend the paper. It deals with an exceedingly troublesome problem. When I saw the title of the paper announced it reminded me of a man who came to consult me a few days ago. He said that he had contracted gonorrhea five years previously and had had it up to date. I suppose that he will continue to have it for sometime.

There are two things against which I wish to protest. I do not like the term gonorrheal rheumatism. We ought to stop confusing things with rheumatism. We ought to say gonorrheal arthritis and not gonorrheal rheumatism. These are

two conditions that are entirely different from each other.

Another thing is the tendency of the laity to treat themselves when they have gonorrhea. I think that much good could be done if physicians will continually impress on newspaper men and on advertising managers the evil of such remedies as are advertised to cure gonorrhea in a few days or after a few applications or doses. This is the chief reason for there being so many cases of uncured gonorrhea. We all know that the most violent infection will sometimes subside of itself after a few days, that is, the discharge will stop, without anything at all being done. And these advertisements lead the laity to believe that the case has been cured when the discharge ceases, and the patient continues to sow his worse than wild oats wherever he goes, spreading the disease broadcast.

We ought to protest against this. Every physician ought to use his influence for the correction of this evil and the abuse of the press by this sort of advertising.

Dr. William Bailey, Louisville: I want to speak along a line that will not, perhaps, be all together acceptable, and that is in regard to prophylaxis or the prevention of gonorrhea. I think that we need to arouse in this country a higher plane of morality. It should be regarded as a disgrace for any man to contract gonorrhea or expose himself to the possibility of infection, and the law ought to impose a penalty on any man who is mean enough to give gonorrhea to his innocent wife. I believe that the statement made in the paper that a large part of the gynecologic work done in this country is due to gonorrhea is correct. The evils coming from gonorrhea are greater than those following syphilis. I believe that this can not be controlled until we regard the having of gonorrhea as an improper thing.

I do not see any way of regulating this matter until gonorrhea can no longer be regarded as a bad cold. Some men say that they have a discharge regularly every year. I do not believe that the disease will be controlled until physicians tell their patients just what gonorrhea is and what it means. That it is not expected that every man must have it to prove his manhood, and that the man who contracts gonorrhea dishonors himself. It is not a thing to boast of any way.

Dr. R. B. Gilbert, Louisville: I wish to speak of one unfortunate complication of this disease and that is ophthalmia neonatorum occurring in an infant borne of a woman who has been infected by her husband. It has been my custom while attending the female ward in the City Hospital to have the woman irrigate herself twice daily with a strong antiseptic solution with the view of keeping the genital tract as nearly sterile as possible so that when the infant is borne it might

escape this deplorable and serious affection of the eyes. My results have been good. Out of sixteen births in three months only one had gonorrhal ophthalmia, although nearly all the mothers had gonorrhea.

Therefore I make it a practice, even in private practice, wherever a woman has a leucorrhea, which often is gonorrhea, but the family physician dare not speak of it as gonorrhea for fear of offending the family, to advise these irrigations. For the safety of the infant and of all concerned I invariably get some of the discharge under some pretext or other, for examination, and I often find the gonococcus present. For the benefit of the infant I make it a uniform rule to have the woman irrigate herself daily or twice daily with a permanganate of potash solution or a boric acid solution so that the infant may escape the gonorrheal ophthalmia.

Moreover, during the parturition I use a permanganate douche immediately after entering the lying-in chamber, especially when there is the least suspicion that the woman had a leucorrhea. I also bathe my hands in the permanganate solution so that the gonococci all along the tract are destroyed before the infant reaches the point where it may be infected.

Dr. B. J. O'Connor, Louisville: One half of our time at this meeting has been spent in the discussion of the prevention of disease. We are doing a hero's work with everything but an early prospect of reward in sight. Speaking more particularly of the prevention of gonorrhea and syphilis, we ought to look to the work that has been accomplished in Germany. Only recently Professor Finger, of Vienna, made the statement that all laws looking toward the control of prostitution were absolutely worthless and valueless in the control, or lessening of venereal diseases. They have abandoned them entirely and now devote all their attention and efforts to a campaign of education. In all large cities antivenereal societies are organized which are open to the public and are maintained by subscriptions obtained from various sources. Lectures are given and pamphlets setting forth the evils and dangers of venereal diseases are distributed everywhere. Much good is being done in that way and it seems to me that that is the proper thing to do; educate the public in these matters in plain terms so that they can appreciate at least the physical if not the moral evils brought about by illicit sexual intercourse.

Dr. I. A. Shirley, Winchester: When a man has gonorrhea the danger is in that he will communicate the disease to his wife because he is really ignorant of the nature of the disease. Some doctor told him that he had a bad cold or something else. That is wrong. Doctors should inform their patients that they have the disease,

when they have it, and just how long it will take to cure it, and what must be done to obtain a cure. The proper thing to do is to prevent the disease, but if we can not do that let us treat our cases intelligently and with the co-operation of the patient.

Dr. J. M. Ray, Louisville: Dr. Gilbert mentioned one thing of particular interest, and that is the prevention of gonorrheal ophthalmia. The Doctor spoke of the intravaginal injection. I think that many doctors are called to deliver a woman before they have an opportunity to find out whether or not there is an infection, and therefore means directed along this line will be of no avail.

The experiments of Crede, of Leipsic, have shown that the best method of preventing gonorrheal ophthalmia is by using nitrate of silver, dropping a few drops of a one per cent. solution into each eye immediately after birth. In one of the lying-in hospitals of Leipsic there were at one time over one hundred cases of gonorrheal ophthalmia yearly, but after using the silver nitrate he reduced the number of cases to less than one-tenth of one per cent. The same experience was gone through with in New York. I think that this method is simpler and much more liable to be of use than the intravaginal injections of antiseptic solutions before birth.

Another matter that appealed to me along this line of prevention of the disease is the legislation that some of the states have introduced, calling the attention of the public to the dangers of ophthalmia neonatorum. Several years ago a committee was appointed by the American Ophthalmological Society to investigate this question in all its phases. This committee found that the disease was on the increase. That the blind institutions in the United States were filled with children hopelessly blind as the result of ophthalmia neonatorum. At the request of this committee I examined the children in the Kentucky institution and found that 33 1-3 per cent. of these children were blind as the result of preventable eye disease. In some of the institutions in the United States it was found even greater than this.

As a result of these investigations we tried to introduce bills in the state legislatures and we tried to educate the people as to the dangers of this disease. A copy of a bill was sent to me and I handed it to a prominent member of the legislature. The bill was introduced and laughed out of the legislature. They made fun of it and called it the "sore-eyed babies bill." It came to the point that any member was afraid to say anything about the bill. The whole thing was dropped. Once or twice since I have spoken to prominent legislators, but they have been afraid to take hold of the bill. Other states in the Union have passed such a bill and it has had some effect,

At the last meeting of the House of Delegates of the American Medical Association, Dr. F. Park Lewis, of Buffalo, introduced a similar bill and that bill is now pending there.

I think that the disease is one that is fraught with a great deal of danger, and while the majority of doctors recognize this danger, yet a great many of them have not been unfortunate enough to have had disastrous results follow. Given a case of gonorrheal ophthalmia in a full grown nine months baby and with proper treatment the chances for recovery are very favorable; but with a prematurely borne baby, I have never seen one recover without damaged eyes.

Dr. J. R. Morrison, Louisville: It is impossible to tell who has gonorrhea and who has not. Just recently I saw a case of ophthalmia in a baby where there was no reason to suspect that either parent had gonorrhea. Therefore I think it extremely wise that the use of silver nitrate in the manner described be made a routine practice in every case of confinement. It can be done without the least trouble. In all large institutions it is a routine practice. Every baby is treated with these instillations. It is also done in all private dispensaries. We should use the method far more frequently than we do.

Dr. J. G. Carpenter, Stanford: There is no doubt whatever that half or more of the gynecologic operations on the uterus and its adnexa are due to gonorrhea; not among the poor women; not among the women in the humbler walks in life, but in the women of the best societies. The husband in his youth had a gonorrhea which he promptly transmitted to his wife. She develops septic endometritis or tubal or ovarian disease and at some subsequent pregnancy, she develops sepsis due to that old gonorrhea, and the medical attendant gets the blame for it. If you will examine the husband carefully you will find that at some time in former years he had a gonorrhea and that this is to blame for the trouble and not the doctor.

I believe that every man with gonorrhea should be quarantined. If there is any place or time that the red flag should be hung out it is when a man has gonorrhea; or he ought to be made to wear a red emblem so that we can know him. In years gone by a scarlet letter was made use to designate one who had fallen from the path of virtue. Why not place such a scarlet letter on the breast of every man who contracts gonorrhea.

To treat gonorrhea properly and successfully the patient should be under the complete control of his medical attendant. Isolate him; quarantine him; control him, even if you have to use a Winchester. He should be examined from time to time. His urine as well as the discharge from the urethra should be examined. At the final wind-up of the case the patient should be sounded

and endoscoped. The average size of the meatus is 27 mm.; the average size of the urethra is 32 mm. You have no right to dismiss the patient until the urethra is of normal caliber and gonorrhea cured, and do not let him marry for at least a year or longer.

Dr. Joseph M. Mathews, Louisville: I believe, with all deference to other speakers, that this is the most important paper to come before this Association. The last few days we have had with us one of the most distinguished men of the East to talk to us about the great white plague. All credit should be given him and his friends, but I believe from the statements made here that this paper is more important than the distinguished man's literature. We are confronted with a great black plague.

Suppose that the statements made by these gentlemen here on the floor and by the author of this paper were read before the public say in one of our beautiful churches, including among the hearers the women. Tell them that sixty per cent of the diseases incidental to female life are caused by a disease we can not mention. Would they not be foolish if they did not speak up as one man and one woman and say, "Doctor what is that disease?" If the father is made to recognize that his daughter is to be wrecked by a disease unnameable, would not he demand that you mention it? Fie upon such mush!

I believe that it would not be stretching anything to put a red ribbon on a man so as to show people that he has gonorrhea. Gynecologists tell us that most abdominal sections are done for this disease. Explain to the public what an abdominal section means. Is it right that we should keep our mouths shut? Is it wrong that a man should be labeled as Dr. Carpenter suggested? Not at all. If a man has smallpox you label him and quarantine him. The other fellow has the big pox and we are afraid to mention it. I do not believe in such modesty as that. Is there a remedy? Yes; there is a remedy.

I do not believe that every man has had gonorrhea nor do I believe that Dr. Bailey's idea of preaching morality to men and women will accomplish much. That has been preached ever since the time of Adam, and men are just the same to-day as they were then. You will have to control men. You can not teach them morality. You have to control the disease in some other way and that way is by law. As one doctor tells us this inspection of prostitutes does not amount to anything. You can not prevent men from going to these places. Let us accept the situation just as it is: That men and women are immoral. Are we going to permit these men to marry into our families and wreck our daughters and kill those near and dear to us without doing something? We have been discussing this thing from time immemorial but we have not done anything.

Dr. Windell referred to the enormous death rate from gonorrhea. We have never done anything about it, however, except to laugh at it. I believe, gentlemen, that there is a remedy, and that remedy lies, first in educating the people, not about morality, not denouncing them because they are immoral, that will not do any good, but showing them the dangers to their lives, to the lives of every member of their family from these terrible conditions by lectures. Let the preachers talk about it on Sunday to their congregations. Why should they not? If this disease is killing their people, their friends, let them say something about it. Let the press write about it. Let us have articles on this subject. You doctors should talk and write about it for the benefit of the laity. The laity does not know the terrors of this disease. Let them know it.

My idea for sometime has been this. That every state should have a commission appointed by the governor the commission to consist of five competent doctors, one of these to be a genitourinary man. This commission is to examine every man who proposes to marry. If he is in good health and free from gonorrhea, give him a certificate of good health and he ought to be glad to show it; glad to publish it. If he can not pass the examination, he should not be permitted by law to kill your daughter and to wreck mine. Therefore I say, as a protection of the public health that such a law should be enacted, and that we, as medical men, should contend for it because there is no other way of controlling this terrible disease. The law is the thing to do it, not moralizing.

Dr. James B. Bullitt, Louisville: In the ancient days of the Puritan it was the scarlet letter that marked the woman who had been defiled. Dr. Carpenter's idea was that it should be the scarlet letter that shall mark the man who is defiling—not the woman who is being defiled, but the man who is defiling others. When the time comes that it will be possible to so brand a man, instead of marking him with a scarlet letter he ought to be made to wear on the outside the white rag, then it will be possible to control the spread of gonorrhea and not before.

Dr. C. J. Walton: I wish to endorse every word that has been said in condemnation of parties who have contracted gonorrhea. There may be a remedy in legislation, if so I have not been able to find it. I once introduced a bill for the prevention and cure of sore eyes in babies, and it was received with derision, and so in my opinion, it will ever be before a Legislature, you may get some support from it, but if you do, you will do better than I have been able to do. Legislators are afraid of their shadows.

ASEPSIS.*

By WOODSON H. TAULBEE, M. D., Maysville, Kentucky.

Under the title Asepsis I shall not confine myself to its application to the surgeon or occasional operator, but to the general practitioner also and to every member of the profession. Every one will readily concede that the great advancements and wonderful achievements in surgery have been made possible by and are in keeping with the improvement in aseptic technic.

Notwithstanding the almost absolute dependence on asepsis for successful results, there is as much surgery being done to-day with as little regard for asepsis as before its advantages were known. There is a cause for this which I believe lies in the faulty training of the student to properly appreciate thorough asepsis.

Ideal cleanliness in a physician or surgeon must first of all be an innate characteristic and then can only be developed and perfected by actual practice, personal experience and perseverance. Lectures, demonstrations and reading, while very essential and in the right direction, cannot teach asepsis any more than the description of a piece of music conveys any idea of its sound.

The student in the amphitheater does not learn to wash his hands surgically clean or sterilize instruments, dressings, etc., by watching it done. He must actually go through the process again and again to gain any practical knowledge of the technic. Being able to describe the preparation of a patient for an operation, with preparation of surgeon, assistants and everything that is to be used in or to come in contact with the procedure, does not by any means show that one is able to execute the process. Of course, it is very essential to know how this ought to be done, but one may be able to describe perfectly the various steps of a gastroenterostomy, yet be utterly helpless when it comes to an actual demonstration of the operation. Aside from self satisfaction, knowledge that practical use cannot be made of is worthless.

The actual practical training in asepsis that the student of the average medical school gets is very scant, although it is of as much if not more practical importance than any other one subject. I know of no subject with so much to learn and with so broad a field for improvement. I have known many students to go through school and enter prac-

*Read by title before the Kentucky State Medical Association, Owensboro, October 11, 1906.

tice who never washed their hands in the college building. How can a man with so little training be expected to practice modern asepsis? The faulty and neglected training explains the faulty and neglected technic. It is not possible nor is it best for every doctor to be a surgeon, but it is possible and it is best that every physician be a clean man as to personal habits, work and equipment. Aseptic technic is far from being perfect, there being new and good things discovered and adopted every day; but how can a man perfect a thing he has never begun?

The only proper place to learn asepsis is in the medical school, and it should be hammered into the student day after day by lectures, demonstrations and actual going through the various processes of sterilization from the time he enters school until he leaves and he should be required before leaving school to show convincing evidence that he will be a thorough aseptic physician, for if a doctor understands and practices asepsis he is a good physician, if he does not understand and practice asepsis he is not a good physician.

When a man begins to acquire a knowledge of cleanliness, it becomes a part of him and each day he develops something new pertaining to it, and recognizing the advantages of it, everything to him is in a septic state until carried through a process of thorough sterilization. A man who understands asepsis and sees the good results accruing from its practice, appreciates more each day its advantages and delights in his work and the improvement of his technic.

The process of asepticizing is not a difficult one until you come to the body itself. Infection is most commonly introduced by the hands, instruments, dressings, sutures, etc. Every thing used in a surgical operation can be sterilized by heat except the surgeon's hands. The hands can be scrubbed and carried through the various so-called antiseptic solutions, yet from deep scrapings pathogenic organisms whose natural habitat is the deeper layers of the skin are found to be present. I can see no explanation for the successful results of men with bad technic other than the inhibitive forces of the tissues are capable of dealing destruction to the organisms they introduce,—and this is a most powerful force, for wounds that have been found to contain an enormous number of pathogenic organisms have healed by first intention when more organisms are introduced than the inhibitive forces can deal with, the tissue resistance is lowered and suppuration results. We have a means of overcoming the dan-

gers of infection from the hands which is a most effective one, and I cannot understand why a method which is recognized to be the simplest and best by men doing the best work is not more universally adopted by surgeons and physicians who come in contact with parts susceptible to infection.

A short time ago I read an article by one of the most famous surgeons of America, in which he said he never used rubber gloves except when he was working on a septic case, and then it was only for the protection of his own hands. At the same time he said that a surgeon should not allow the hands of assistants to come in contact with cut surfaces except when absolutely necessary.

Why not guard against the dangers of infection resulting from absolute necessity of assistants' hands coming in contact with wounds? He admits the unquestioned liability to infection from hands, yet he does not use or require his assistants to use rubber gloves which have been sterilized, a sure means of preventing hand infection. A man who does not give his patients the benefit of the safest and most approved methods violates his professional obligation. It is certainly a violation of professional, moral and every form of obligation for a man to thrust his ungloved hand into an abdomen, wound or any part susceptible to infection, no matter how much he has scrubbed or how many antiseptic solutions he has gone through.

No man has a right to make a vaginal examination or deliver a woman without using rubber gloves. The most common objection is that the sense of touch is destroyed and work cannot be so effectively done. This objection is an imaginary one. If I were the patient, I would rather not have my work done so well, if to have it done well rendered me in the least liable to infection. But this is no question, for with a little practice one is able to acquire practically the same sense of touch and to do his work quite as effectively and certainly more safely. I have heard men say who were working in an abdomen that they would like to make certain explorations, but to do so would necessitate the introduction of the entire hand and that there was always more or less danger from this of infecting the patient. With sterile rubber gloves, no such dangers exist.

For very delicate work, where the sense of touch is more in demand, the thinnest gloves should be used; for work that can be carried out under the eye the heaviest gloves should be used. In the gynecological department of Johns-Hopkins Hospital very heavy gloves with thick seams are used. Rubber gloves, if cared for properly, can be used

daily for about six months. For handling instruments, dressings, sutures, etc., and for doing minor surgery and dressings, we use thin cotton gloves that are free from lint. They are easily laundered, boiled and baked. They protect the wound from perspiration of the hands and protect the hands from septic matter.

Every one, especially those doing surgery or taking part in a surgical operation, should bathe frequently, at least one daily general bath, remove all the clothing and don a sterile suit previous to scrubbing up for surgical work. The head should be covered with gauze or a cap which entirely covers the hair, and a pad of gauze should be worn over the mouth and nose.

Very nearly every general practitioner practices obstetrics, but comparatively few practice asepsis in their obstetrical work. Every physician and surgeon uses the hypodermic syringe. How many physicians boil their hypodermic needles before using? How many boil their syringes, tongue depressors, applicators, etc.?

Very recently I saw a physician inject cocaine into a septic abscess, and with the same syringe on the same day give a typhoid fever patient a hypodermic with the same outfit, without so much as having washed the needle. A physician should use nothing that is to come in contact with a wound which cannot be sterilized by heat, either moist or dry. Cotton, gauzes, sutures, etc., which you get and which are marked "sterile" or "aseptic" should not be used until they are sterilized. In the dressing and after-treatment of wounds and obstetric cases, it is as important to use every precaution against infection as primarily. We have never had pus to develop after an operation, but if it should it would be the result of some technical breach, and we would feel wholly responsible for it.

My plea is for more thorough training along this line and the adoption of everything that lessens danger to infection. If every physician had the regard for asepsis that he should have, it would not be long until a septic technic would be perfected.

THE RELATION BETWEEN THE RAILWAY COMPANY AND THE RAILWAY SURGEON.*

By CLARENCE H. VAUGHT, RICHMOND, KY.

Mr. President and Gentlemen:—The bringing of damage suits for personal injuries has reached so exaggerated a degree, that it is no

rare occurrence for an injured person to see an attorney before he sees the doctor, and the story the latter hears often speaks more eloquently for the medical knowledge of certain members of the legal profession than for the veracity of the patient.

There seems to be an idea in the minds of some lawyers who make suits for personal injury a specialty and of a great many of the employees of railroads, that the company and the surgeon have things fixed, in other words, a positive and secret understanding, a conspiracy if you please, and this is always directed against the victim of the accident. I have had at least three attorneys ask me on hearing that this convention would be held here, if this association did not have a code, to the effect that it was part of its creed to protect the company's interests in damage suits for personal injury? My reply was that I did not know of any code this association had save the code of honor. The truth is ours is not the testimony that some damage suit lawyers usually seek as we are disinterested only to the extent that the truth be known, and our testimony is not the kind known in legal parlance as *ex-parte*. We serve as a barrier against the dishonest claimant and it is to his interests that our testimony be discredited, in any way if possible. Too often it is not the testimony of one who knows anything about the case that is desired. A medical witness who is dishonest and one that will testify to what the plaintiff wants him to, a man who is ignorant and does not know what he is talking about too frequently makes the best impression on the jury. Such a witness will testify that he believes anything to be true because he is ignorant, of anything himself.

Dr. M. L. Harris before the Chicago Physicians' Club, states:

"That he has for the past several years been employed as surgeon to large corporations. During that time he has had under his personal supervision thousands of accident cases, and has had a hand in the distribution of millions of dollars of indemnity. This money many times was not distributed in a just manner, for the reason that most of those injured did not receive what they were entitled to, and on the other hand, a much larger number received many times the amount they were entitled to. The reasons for this are many, principally the law as it now exists, and largely because of dishonest lawyers and dishonest and ignorant doctors.

He said he could mention a number of instances where people had gotten on cars for the express purpose of receiving an injury, had taken with them witnesses to

*Read before the Kentucky Association of Railway Surgeons, Richmond.

see the accident, had people standing on the corner for same purpose, and had a doctor waiting around the corner to take care of them as soon as the alleged accident occurred, and then had the patient hustled to another particular doctor, as though they were hurt."

From such statements as these from a source so thoroughly reliable, does it not seem natural that we in our relation to the company should be of unquestionable character and integrity, and although realizing that we are testifying before a jury to some extent biased against us because of partiality for the plaintiff in the case, give our testimony in a plain, honest way, using the simplest language possible, and avoid a contest of wits with the opposing counsel though the provocation be great. We should never lose our temper, and if such a thing be possible, convince the jury that we are not the defendant in the suit, and seek only to testify to the facts, and that the company expects nothing more from us, and that no conspiracy exists, save in the imagination of the plaintiff, or his counsel, and that notwithstanding the fact that the great railroads of this country are corporations, and declare dividends to the holders of its stock or bonds, no matter if it is true, as is alleged, that discriminations are made in carrying freight, or that so arrogant an octopus as the Standard Oil Company receives secret rebates, it is no reason that the company desires to shirk or shift the responsibility in personal injury claims, or desires its surgeons to do so. Our relation to the company should be, I think, close and confidential, or as that between the Life Insurance Examiner and the company he represents. What confidence would an insurance company have in an examiner who passed as "a No. 1" risk the tubercular, Syphilitic or the Ataxic?

It seems clear to me that our duty with reference to the railroad or insurance company, should be to protect its interests at all times from the acute and chronic malingerer, and to make it a point that the unfortunate victim of the railway disaster sees the surgeon of the company before he sees the opposing counsel.

I would not have you infer that I believe that railway companies are always right or that no blame should be attached to them in matters relating to personal injuries, for operatives are notoriously negligent, and often are responsible wholly for many of our most unfortunate railway disasters, and it would be well no doubt for the company's own good to demand of the men who operate the road, the strictest sobriety and moral character and

absolute subjection to superior orders, and impress upon them the fact that negligence or indifference here will not be tolerated, because perhaps many human lives are depending upon their accuracy. Orders should be executed at all times with military precision. It is true, however, that such is not the case. However, the tendency is in that direction, and soon it will be a fact that the positions of this class are open only to men of honor, character and sobriety.

We might expect indeed, a certain per cent. of casualties for this great country with more than two hundred thousand miles of road, if that per cent. were not so large, and if the number did not show year after year, an increase instead of a decrease. Whereas we should expect that improvements in railroads would work such a result, it is not forthcoming, and the report of the Interstate Commerce Commission says as to the increased employment of new men to help with the increased traffic, that there is evidence that many of them are entrusted with dangerous duties after but little training, and that both old men and new, were in the stress of work kept on duty for many years continuously beyond a reasonable day, and often beyond physical endurance.

The report goes on to make special note of dire accidents, notably by men who had been on duty without adequate periods of rest, and the report could say no less than that such incidents of over work constitute a grave criticism of the management of the roads in view of the high standards of safety which the roads set for themselves, and which the courts and people justly require of them.

Stations nor crossings are guarded as they should be, and generally speaking, there is free and easy way of doing things that is unquestionably at the bottom of a vast number of casualties of all kinds. Many of the great trunk lines are fine in motive power, in rolling stock and road bed as any in the world, and yet accidents occur. The Pennsylvania has just had one in which nearly a dozen people were killed and three times that number were injured.

A higher standard of care is one thing needed. Until this becomes imbedded in public opinion we are not likely to have it. We shall have no diminution of those things as long as the national temperament is what it is. We have the most luxurious trains in the world because our temperament demands luxury; when it demands safety we shall get it.

Notwithstanding the great number of personal injuries that really occur, perhaps there are more malingerers and frauds of every description seeking redress for injuries that ex-

ist only in a badly disordered brain in railway traffic than perhaps any other line.

Mr. Lawrence Godkin in Hamilton's System of Legal Medicine gives a striking illustration of the typical malingerer with the following illustrative story:

"The plaintiff in a personal damage suit testified that his right arm had been so injured that he was unable to raise it any longer to a horizontal position. Upon cross-examination the defendant's counsel asked him to indicate how high he could raise his arm. 'Only so high, replied the witness, lifting the arm with apparent difficulty a few inches from his side,' and 'how high could you raise it before this unfortunate occurrence,' asked the lawyer suddenly: 'So high, replied the witness, raising the same injured arm above his head with ease.'"

The following case also well illustrates the class of people with which railways sometimes have to deal. This is from Dr. Bailey's book on Accident and Injury, whose pages I have consulted freely in the preparation of this paper, reports the following:

"A man brought a claim against the Western Railway for injury to the spinal cord, which was the alleged result of a collision: the patient was apparently paralyzed in both legs, and for two years was never seen to walk without crutches. One day at the end of this time while sitting with the Claim Agent in the office of the corporation, a settlement was agreed upon, and the man signed the release and received his check. He arose briskly from the chair and commenced to walk rapidly out of the office. 'Hello, said the Claim Agent, have you not forgotten something?' The satisfied claimant could not repress a blush at seeing that he had left his crutches standing idly in the corner."

Up East the attorneys are so eager to render first aid to the injured, that they chase the ambulance as it starts from the depot, or scene of wreck, to the hospital, as though they were being carried to the hospital for slaughter, or as if they would care if such was the case.

Is it not a fact that needs no proof, that we are living in an age of humanity, an age of sympathy, and that the great army of railway surgeons of this country have a mission of humanity to perform, as on the battle field in every country in this day where human suffering is seen, there you see the Red Cross on the sleeve or cap or gown of those, whose only mission can be to help those who can not help themselves, and as the word is flashed from the wire that a wreck has occurred, as swift as steam can carry them to the scene of the disaster, you can see the railway sur-

geon equipped with all appliances necessary to relieve, at least temporarily, the pain and suffering of the unfortunate victims of the disaster, and are not there with the view (as is held by some) to become expert witnesses for the corporation that employs them. This phase of the matter has never entered the mind of the true railway surgeon. His duty is not that of an expert witness; it is purely to render skilled service to those who suffer, but if he is true to himself, to the patient and to the company, and it becomes necessary, sure it is that his testimony should not be held so lightly, -as is often the case by the juries before whom such cases are tried, or if facts are sought for, he alone is in a position to state the extent of the injury, the probable time it will require for the victim to recover, and whether or not the injury will be permanent, and upon this basis alone, it seems to me that a jury could possibly fix the liabilities of the company for the injury. It is notoriously true, however;

"That a hysterical girl, without responsibilities and without the capacity for self-support, may receive a verdict for some trifling mis-hap much in excess of that given a working man for injuries which disabled him for life."

"By the German law, the indemnity allowance is diminished or increased according as the injured person gets better or worse in time. In America when the plaintiff gets his money, his case is judicially at an end, his disease may become worse, but he is entitled to no further indemnity, or he may become better without his being required to make any return of the proceeds, and yet the verdicts are notoriously capricious, often unjustly reflecting the sex and personality of the injured person."

"Social conditions are considered. Disfigurements, such as facial paralysis would not interfere with the working capacity, but they would lessen the chances of a young woman marrying well. The loss of an eye might not seriously interfere with vision, but it would be ruin, were the other eye lost later. Such questions come up in regard to all injuries, for after all, it is the effect of the accident upon the injured man, rather than the disease itself, which is the important consideration."

If he is to be permanently incapacitated, it makes little difference to him whether his trouble is functional or organic, and it is upon such general effects that all compensation must be based."

I know of no more important or responsible position than that of railway surgeon. It is a position that has many desirable fea-

tures, and one which most of our profession seek. It is a patient that pays promptly and without question, and leaves you in possession of the case without question or dictation from any source, so far as the railway company is concerned.

This much cannot be said for the injured, for with few exceptions, these patients insist upon telling you what they need and where they should be sent. If the worst should happen and the victim's vocal powers can not be used, you may be assured at all times that he will be ably represented by his wife, mother, grand-mother, or some other distant relative, whose organs of speech have never felt the baneful effect of disease. They will insist that were the victim conscious, he would prefer being at home rather than at the hospital, and that he would do better there than would be possible any other place. It is well to listen to this in respectful silence until an exhausted patience demands of you to assure them that you know best, and that your orders here shall be strictly and absolutely obeyed, and if not, the responsibility of the further treatment of the case must rest wholly with them.

In this attitude the company should at all times,—and does, so far as I know,—give you complete authority to act, and stand by you, for by your treatment of the case very much may depend upon the usefulness of the injured person. The position carries with it a certain prestige in any community, and the perquisites may be summed up in transportation for ourselves and our families. The treatment accorded us is always courteous and considerate.

Another important feature in this connection is the estimate that approximately fourteen millions of dollars are paid annually for damages to injured persons, and everyone of these has no doubt had skilled surgical attention, furnished by the company and paid for by it, and these surgeons have also been necessarily the chief witnesses for the company that employed them. Had not this been the case, this sum might perhaps have been twice the amount.

In addition to this sum, seven millions of dollars is expended annually in the maintenance of a legal department, one-half of which expense may safely be attributed to the defense and settlement of personal injury suits."

In Cook County this year 3,600 suits for damages for personal injuries are now pending, and the damages claimed are between fifty and sixty millions of dollars.

"Thus, personal injury claims constitute a most important feature of modern life, not

only transportation companies, but private individuals, as well, fully expect to pay for injuries which are received through actionable negligence. Similarly, few receive injuries traceable to the injury of others without promptly demanding compensation."

In our mechanical times the frequency of accidents is enormous, and consequently the valuation of injuries received, and the compensation to which the injured person is entitled, are matters of prime importance. Greater interests are involved than in any other medical or legal question."

The report of the Brooklyn Rapid Transit Company for the year 1901, showed more than one million dollars was paid for personal injuries and the expenses incident thereto. This sum represented nearly ten per cent. of the gross receipts of the company for the year named. The contingent fee plan is the one usually in evidence. It is made possible solely through the poverty of the plaintiff, who is generally unable himself, to carry on the great expense of the trial-at-law, and who consequently is forced to accept professional services, which are to be paid for on a percentage basis out of damages awarded. By such a system, the lawyer is made more than an advocate, and the expert medical witness more than a mouth-piece of science. These have been known to so far exceed the limit of their respective callings, as to become partners with the litigant. It is here where the railway surgeon can be of service; only in case he is competent, and has the highest integrity can he be used in defending the company's interest from the impostor or malingerer, as well as in the capacity of surgeon.

I read a most excellent article some months ago in the Journal of the American Medical Association from Dr. Marcus H. Thomas of Indiana (whom we have with us to-day) dealing with this phase of the subject in a more masterly way than I had seen from any other source. Dr. Thomas believes that new fields for the student of medical jurisprudence and surgical practice should be opened here, contending that the surgeon who is qualified in negligence law was in a position to render more effective and economical service as adjuster to personal injury claims than could the company's attorney; arguing that a lack of co-operation between the legal and surgical staffs exist, due to the one failing to grasp the importance of the technique of the other, and that it is here that the medico-legal claim adjuster could step to the assistance of both departments with economy to the company, and he quotes the statement from Dr. Pierce Bailey of New York,

author of that splendid work, on diseases of the nervous system resulting from accident and injury, to the effect that he believes the best adjuster a railroad could have, would be a medical man with knowledge of negligence law, and that the nature of a railroad accident, collision or derailment, renders all participants principals, rather than witnesses to the injury of another.

As to this phase of the question I am not in a position to express an opinion since I have never known such practice to obtain, but it does seem to me that in many instances, the surgeon could be of incalculable benefit in the adjustment of personal injury claims, because of the fact of his more thorough knowledge of the extent of the injury, and its effects upon the injured in the future.

"THE MANAGEMENT OF THE EPILEPTIC STATE."*

By CURRAN POPE, M. D., Louisville, Ky.

Under the generic term epilepsy, we consider many conditions that are, generally speaking, little appreciated, for by this term we do not simply mean a common convulsion or "fit," but states of dual personality, dreamy states of consciousness, peculiar phases of transient unconsciousness localized or Jacksonized attacks and lastly the well known convulsive attacks that are the genuine or essential neurosis. It was a disease held sacred by the ancients and many savage tribes and peoples, in fact it often protected the individual in the same manner as did insanity. Epilepsy is almost *prima facie* evidence of degeneration, physically, neuropathically or psychopathically. It is often hereditary, often transformation or other neuropsychic disease takes place, while alcoholism in parents forms the basis of many cases. While epilepsy may appear at any age, it is essentially a disease of the first two decades of life. Convulsions in infantile life should always demand careful watching and *presumed* to be of epileptic origin, for a tendency to gloss over a convulsion exists with remarkable frequency among physicians. The attacks may commence at any age, even in the sixties. The sexes are about equally divided. The author questions seriously as to whether the exciting causes of epilepsy possess the value given to them by some writers, especially phimosis, ear and ocular troubles, but rather believes that the case would have had epilepsy anyhow, and its excitation would have resulted from other causes equally insignificant had these not been

present. In other words the true condition is one in the cortex, latent or active, and no matter how brought into action it is essentially a cortical disease, a degenerative disease, the attacks of which may be and are precipitated by external or systemic conditions, but these bear the relation of the match or fulminate to the charge proper. It is an axiom to which there is no exception that the more nearly correct and accurate we can make the epileptic's functions the better he is off and for this reason his ocular and aural lesions must be corrected; his teeth put in perfect condition; adenoids and enlarged tonsils removed; mouth breathing corrected; circumcision performed, hemorrhoids removed, but all with the very definite idea in mind that by so doing we are *not treating the epilepsy per se*, simply removing those burdens that are prone to cause a recurrence of the attacks and by their presence and persistence interfere with the *management* of the *epileptic state*. I say advisedly, the management of the epileptic state, for I wish it to be understood clearly that we should not focus our mind upon the epileptic, but rather upon his state and condition and in so doing treat him rather than his disease. Depravity of nutrition forms a basis frequently for the commencement of epilepsy, and in many other cases is an accompaniment. Of all sources for the production of attacks, the most fruitful cause has in the author's experience been the gastro-intestinal tract for these cases are notoriously flagrant violators of all dietetic laws, being large, irregular, frequent and imprudent eaters, careless of kind or quality of food, self indulgent, with appetites hard to control and seeming pertinacious desire of things known to produce their convulsions. The pathology has so far eluded the most careful search, although theories galore have been suggested. Perhaps better methods of research will reveal the lesion, though at the present time a cortical instability of the neuron bodies there located, with an easy upsetting from various toxic and other causes is the generally accepted condition. The attacks are due to sudden explosions or discharges of nerve force, the seat of which is in the large motor neuron bodies, due probably to the weakening of the sensory control. The aura, fit, and post epileptic stages are too classic and well known to need elucidation here. Epileptics whose attacks are infrequent may live their allotted time and even do good work, though epilepsy has a tendency to shorten life. The best cases are those that occur after the twentieth year, or where the attacks are either diurnal or nocturnal.

Of all the diseases, none demands more act-

*Read before the Kentucky Valley Medical Association.

ive and prompt treatment than cases of epilepsy and in their management rather than in treatment lies the question of success. Cases must be treated early and vigorously managed. It may be considered axiomatic that children who have had one or more convulsions must be presumably a candidate for epilepsy in later life, and for this reason the danger of the condition should be explained to the parent and the child kept under careful medical supervision, management and treatment for a period of not less than three years. Were this plan followed out, it is the confident opinion of the writer we would have fewer cases of epilepsy than at the present time, but the need for such urgent measures seems to have made but very little impression upon the average medical mind. Those whose practice along certain lines have brought them intimately in touch with epileptics and their management, learn to wonder at the tales of apparently gross neglect with cases of early and tender years. In the management of the epileptic after the neurosis has fully developed, moral control enters largely and we should exact from these cases the same obedience that is expected from the common soldier and by so doing a wholesome respect and confidence is thereby engendered. Truth should be inculcated for these cases have a tendency along lines that deviate from the strict line. In the best balanced of individuals there should exist at all times a normal restraint of passions, both mental and physical, and in this respect the epileptic should be taught to never give way to angry feelings and to restrain himself at all times. Emotional states are bad for these cases and where persisted in, frequently of themselves produce attacks and at the same time tend to loosen the hold the epileptic should at all times maintain upon himself. In like manner the excitement and over-stimulation that comes from the reading of exciting literature, especially such as dime novels may not only upset much that has been done for him, but may actually form the basis of post epileptic conditions, a case of which has recently occurred in the author's practice. Temperate mental activity is favorable for it must be understood that the epileptic's brain, like that of any other human being, tends rapidly to go to seed and to grow weeds when untended. To this end interesting, unexciting and instructive novels, light history, and books of travel may be read. Even more essential than moderate mental occupation is the industry of the body and while we must train the mind, at the same time the hands should be educated in the arts and crafts, taking especial pains to cultivate the inherited and acquired aptitude of the individual. The epi-

leptic is a pariah, shut out from many of the social and pleasurable intercourses of life, refused responsible mental positions on account of his incapacity and physical occupations because of the attendant risks, dangers of law-suits, and other troubles that may arise in shops under ordinary conditions. It thus stands to reason that the mental and physical education of the epileptic is a peculiar and special sphere of action to which men and women must be trained in order to secure proper results. In colonies alone can these ideal conditions of normal, mental, and physical training accompanied with the advanced methods of treatment of the disease be found, and for this reason the author believes that it is incumbent upon the State to establish for the benefit of those unfortunates an institution, farm or colony where they may learn, labor, and enjoy not only existence, but the pleasures and fruits of occupation. Theoretically this is true; practically as carried out at colonies established in the States of New York and Ohio, the practical results have proven theory and science in this instance to be accurate. For more than one reason, marriage should be forbidden to the epileptic not alone because of the canons of hard common sense, but because of the rights of unborn generations. Not only should it be forbidden, but laws in each State in the Union should be so enacted as to make it impossible for them to marry. Physicians should cast their weight against the marital state because of the supposedly valuable usefulness that comes to those who are married. This is a mistake, an illusion, for while it is a normal condition to procreate, still we find that the household cares, worries, and the responsibilities of the rearing of children, are often times burdens that it is hard for the strong and healthy to bear, let alone those who are physically, nervously, and mentally incompetent, such as the epileptic. Where such an unfortunate event as marriage has been consummated it is the author's opinion that procreation in such an event must be denied them, for it is often the case and especially true with these individuals that like begets like.

In the true management of the epileptic state, certain hygienic and dietetic laws must be enforced, among which may be mentioned the avoidance of tobacco, liquors, wines, coffee, tea, and other useless luxuries that harm, rather than do good. The digestion as a rule is usually weak, the appetite large, and abnormal and as a result of the putrefactive changes taking place in the stomach and intestines, toxins are absorbed, causing frequent and recurring attacks. They must masticate their food, cutting it up finely before

starting to eat. The diet should be a mixed one in which a small portion of meat, once daily at mid-day is allowed. Green vegetables, fruits, and cereals and the limitation of starchy food and sugar should be insisted upon. The author mentions to condemn the habit of candy eating between meals and has noticed in one or two cases improvement from stopping its use. At times benefit is derived by a few days of milk diet alone. Plenty of water should be drunk between meals and where gastric disturbance is great a tumbler of hot water in which ten grains of bicarbonate of soda has been dissolved should be drunk before breakfast. Golfing is a most excellent exercise for out-of-doors; walking the next; in-doors the punching bag is a suitable form for these cases. While the exercise should be active, and sufficient to stimulate the circulation of the blood it should be just short of fatigue. Amusements in cases whose attacks are not frequent may embrace the theatre provided the attendance is at matinee, and that the melo-drama is avoided. Sleep must be secured in large amounts and to this there is no exception. The author believes that the method of treatment to be adopted in these cases consists of the administration of bromide of soda or strontium, night and morning well diluted with water to the extent of fifty or sixty grains daily, and tonics and digestants given after meals. The combined treatment, mental, moral, physical, hygienic, dietetic, medicinal, and hydro-therapeutic is essential and the utilization of only one or two parts of the plan, usually results in failure. Hydro-therapy is now universally acknowledged to form an essential part of the system here laid down. With a little ingenuity it can often times be administered at home. Home treatment may commence with the sponge bath daily, at a temperature of 90 F., reducing daily 2° until 7° F is reached. This should be followed by a rapid friction with a rough Turkish towel. As soon as the patient is accustomed to this procedure we may give the warm full bath (P) at 100 F. for five to ten minutes, following same by effusion at a temperature of 65° F. or with a rapid cold sponge and hard friction with a dry Turkish towel. An excellent procedure for home treatment that the author can recommend is the use of the salt glow or rub (P) until the skin is well reddened, followed by the warm full bath, cold sponge or affusion and friction as above described. It is really astonishing how rapidly patients improve under this treatment. Another excellent method for the home is the half bath (P) at a temperature of 85° to 80° F. for five to ten minutes accompanied by friction and finishing the treatment with an

effusion at 60° F. to the spine. These procedures can be carried out in almost any farmhouse or city residence where even a moderate degree of intelligence exists, but it has been the author's sad experience that the treatment is pursued with enthusiasm and care only for a very short time. It is for that reason that colonies and sanatoria secure better results by pursuing their treatment carefully and pains-takingly. In institutions the proper method is to commence with some sweating method such as the electric light bath, hot air, super-heated dry hot air, or vapor, followed by some tonic method. The author prefers the electric light bath until perspiration has taken place, followed by the horizontal or circular rain bath (P) at a temperature of 100° F. for one to one and a half minutes, pressure twenty to thirty pounds, rapidly reduced to 70. Reduce temperature one degree daily until 65° F. is reached. At this point we may in addition to the foregoing, administer a jet douche to the spine and legs for one-fourth to one-third minute at a temperature of 65° F. under pressure of twenty-five to thirty pounds. All other diseases that are present must be treated, especially malaria, rheumatism, gout, and syphilis.

To sum up, we may say that in the *management of the epileptic*, we should exercise perfect control; arrange his mental, moral, and physical activities; have him avoid nervous excitement, irritation and exhaustion; grant him rational occupation and amusement; insisting upon a simple abstemious dietetics; free water drinking; abundance of sleep; ample out-door exercise; regulation of all bodily functions; the intelligent administration of bromides; and finally painstaking and persistent hydrotherapy associated with massage, and electricity where indicated.

HYPERCHLORHYDRIA OR HYPER-ACIDITY.*

BY G. E. HUDDLE, BOWLING GREEN, K Y.
DEFINITION.

Increased secretion of the Hydrochloric Acid with the Gastric Juice during digestion that is more acid than normally, and richer in it's ferments, this is to be distinguished from Hypersecretion, in which the Gastric Juice is secreted in excess, not only during digestion, but also at any period of the day or night. It is a symptom rather than a disease, and occurs as neurosis purely, or as a reflex irritation as in nervous dyspepsia, grief, great anxiety, mental over-taxation, organic diseases of the stomach, and

*Read before the Warren County Medical Society.

Pyloric stenosis from cicatrized ulcer.

ETIOLOGY.

This is a very common affection, occurring in young adults rather than in old people, and equally in both sexes. The disease is common among the professional classes, in students and overworked business men, stock-brokers, etc. Among the causes which have direct relation to the disease are Chlorosis, Neurasthenia, Melancholia, Psychological disturbances, generally worries and excitement; dietetic errors, eating too quickly, or at irregular intervals, especially food which is irritating, too cold, too hot food, spice, coffee, and alcohol. It frequently accompanies ulcer of the stomach and Pyloric stenosis, causing stagnation of stomach and the food can't pass out fast enough. Tobacco, Renal calculi, Gall-stones, and biliary affections.

SYMPTOMS.

The development of the disorder is usually gradual, the patient at first begins to feel uneasy about two or three hours after eating, this uneasy feeling changes into a somewhat painful sensation in the gastric region, the pain lasts for an hour or two or even three hours, and then disappears with acid eructations and heart-burn, or more rarely actual vomiting. As a rule the ingestion of food, especially albuminous food, alkaline drinks, affords temporary relief, while vegetarians find but little comfort under similar circumstances. Headache and dizziness may be present, but all the symptoms disappear as the stomach becomes empty. The appetite is usually good, constipation is frequent, patient sleeps well at night and maintains good general health and nutrition, the objective signs are, as a rule, a diffusely tender epigastrium during digestion; slight enlargement of stomach upon inflation, while a test meal shows the motor faculty of the stomach usually not impaired, in a few instances it is rather increased. At the beginning the Hyperacidity is most frequently intermittent, patient suffers from this affection for several days, weeks or even months, becoming free from the ailment for periods of time which vary from several weeks to months or even years. After this interval the trouble recurs and at last may become permanent.

PROGNOSIS.

The prognosis in Hyperchlorhydria is not bad as to life, and not infrequently a cure even can be effected, but recurrences are very frequent. All grades of the condition, may occur, however, from slight temporary attacks of Hyperchlorhydria to the advanced Hypersecretion.

DIAGNOSIS.

We will now consider the normal acid se-

cretion of the stomach, and then we can make a diagnosis of Hyperacidity: First, the normal finding; the reaction is acid, free HCl , acid present in proportion of 0.1 to 0.2%, total acidity 40 to 60, ferments, pepsin, renin, present; lactic, acetic, butyric acid, absent; little if any, mucus and only traces of food. The filtrate varies from 20 to 50 C C. The specific gravity of pure Gastric Juice is 1002 to 1005, the total acidity is made up by the acidity from mineral and organic acid in a free or a combined state. Normally this forms rarely more than 0.25%, though according to the time after meals, this varies, the most being found three or four hours after a mixed meal: Second, in making the differential diagnosis of Hyperchlorhydria or Hyperacidity. An accurate diagnosis depends on a chemical examination of the contents and finding of excessive secretion of free HCl , it can be made with certainty only after repeated examinations of the Gastric Juice with a stomach tube and qualitative test of the total acidity is from 70 to 160, free Hydrochloric acid is much increased; Ferments normal or increased, the specific gravity of filtered contents to be 1010 to 1020, the stomach in the fasting condition found to contain considerable quantities of Gastric Juice 80 to 100 C C after a test breakfast, (Ewalds) or a test lunch, (German-See) diagnosis not to be made unless the Hyperacidity is persistent, one must exclude the following diseases: In Gastric ulcer total acidity increased; free HCl , increased, frequently contains blood pigment; in cancer a variable free HCl , greatly diminished or absent, and coffee ground material, stagnant food, and the Boas-Oppler-Bacillus; dilation of stomach caused by malignant Pyloric stenosis, decomposed and undigested food, yeast fungi and bacteria: Reichmans disease (Chronic Hypersecretion), by the presence of 100 to 1000 cubic centimeters of Gastric Juice in the fasting stomach continuously or periodically), gall-stone by pain in the liver occurring later, four or five hours after eating, and are not eased by the ingestion of food or alkalies, and jaundice; spinal and cerebral nervous affections in which there is excessive Gastric secretion, must be excluded before an absolute diagnosis can be made, this may be made from a history of the case.

TREATMENT.

Hygienic Regime is of paramount importance, the daily life should be regulated and cares avoided where possible. Hyperchlorhydria is most frequently caused by too much mental work, thus business men with a great deal of responsibility resting upon them, lawyers, politicians, and physicians must be

sent away from their work to some country place, so as to relieve their brains temporarily from the strain. Cold sponge baths in the morning, bodily exercise of about eight to ten minutes' duration every morning, walking once or twice a day from one-half hour to an hour, horse-back riding, driving, bicycle riding should be highly recommended. Rest after meals, the diet should be principally nitrogenous articles of food. Einhorn advises three large and two small meals daily, and two smaller meals should consist of a glass of milk with bread and butter or like fare, acids and spirits excluded. All kinds of spices, pepper, mustard, horse-radish, and the like must be forbidden.

Thompson, on Dietetics, says, "The diet should consist largely of rare, finely minced or scraped beef of about 3 1-4 ounces with two slices of stale bread or toast or a few crackers with a little butter. Later, lighter, fresh vegetables and sub-acid fruits, milk with 10 gr. of sodium bicarbonate to the tumbler full. Vegetables should be thoroughly cooked, fruits stewed, apples baked. Alkaline vichy may be drunk. A few weeks' course of such a diet faithfully adhered to, often results in a cure."

MEDICATION.

All kinds of Alkalies can be tried, bicarbonate of soda, large dose, potassi bicarbonate, three times a day, two hours after meals, where constipation accompanies the case use magnesia, and some rhubarb, in cases in which the nervous element is more disturbed use the bromides, but should be discontinued after a week or two. The alkaline treatment can be continued for a long time without any ill effects whatever. The Sprudel salts acts well where constipation exists. High irrigation of the bowels is good.

Lavage of stomach daily before the chief meal, will be found good in most cases. In protracted cases, electricity is of great benefit, in most instances the Faradic current should be applied, but in case where much pain, the Galvanic.

"MEDICAL CONSULTATIONS"*

By DR. JOHN A. LEWIS, GEORGETOWN, KY.

The skeleton of this address has been loitering in my brain for quite a while. For some years there has been an impression in my mind, that a free and candid discussion by this Society, of the question of ethics, in its bearing upon medical consultations, as they occur at the bed side, might be helpful

to the profession at large. I am aware that the task which I assume, is a difficult, and a delicate one. I have delayed undertaking it, hoping that some nestor in the profession, some one who could speak with emphasis, if not with authority, some one whom the profession would hear, and heed, might take up the discussion of this question. But as no one so far seems inclined to open up this subject, with no little hesitation, and misgiving, I am determined to draw my bow at venture. I assure you I feel unequal to the task, and I only assume it with the feeling that I may be able to bring the matter to your attention in such a way, as to evoke a full discussion of the question by many of those present here to-day.

In what I shall have to say in the discussion of this question, I do not propose to take up seriatim, either the written, or the unwritten code of medical ethics, but shall confine myself alone to the consideration in a very general, but I trust practical, and profitable way, to some points in ethics, as they effect consultations between physicians as they occur in actual practice.

In a practice of medicine for nearly forty years, I have been called in consultation with numerous physicians, in my own and adjoining counties, and necessarily have had large opportunity for observing the practical side of this question. I have been a close observer, and have made a pretty thorough survey of the situation, have seen the dangers, and the difficulties, that frequently confront consultants, have located the rocks, marked the breakers, and the quick sands, and therefore I have felt that plain and practical talk upon this subject, might be helpful to the profession at large. Allow me to say, that in all these years in which I have met so many physicians, with but few exceptions I have been treated with the utmost kindness and courtesy.

Therefore in the discussion of this question, I bring absolutely no personality, nor have I in my mind's eye any individual, or individuals. I write in no spirit of chagrin, and I have no grievances to right.

When we consider the great army of physicians and surgeons, who may be likened to a life saving corps, moving daily to their work, that of guarding, and restoring the public health, going here and there, passing and repassing on the professional highway, meeting one another as consultants, or in the other varied capacities in which their common calling brings them—all ambitious to succeed, all jealous of their reputation, all watchful of their good names, the wonder is, that they do not oftener conflict and trespass.

*Read before the Kentucky Medical Association, October 10, 1906.

one upon the other than they do.

One of the objects of this paper will be to show you how it is possible by a little judgment and common sense, coupled with a little courtesy and generosity, a little forbearance, and self abnegation, and self control, to steer clear of many of the breakers, upon which friendship and fraternal feeling, often founder. How beautiful and how beneficial it would be for our profession to dwell together in peace and harmony, especially at this time, when the spirit of progress is evident on every hand,—for nothing can stay the march of the medical profession, if only we are united and harmonious.

In approaching directly the question before us, allow me to remark, that a consultation primarily should ever be called in the interest, and for the welfare of the patient, and the patient alone, occasionally it may be secondarily in the interest of the attending physician. No consultation should ever carry with it the thought, of the exaltation of one physician, or the humiliation of another. If this should be kept ever in mind, it would do much to disarm both consultants, they would forget self, and self interest, and turn their attention solely to the welfare of the patient.

The question with whom shall we consult can be dismissed in a very few words. There was a time within the memory of all these older physicians, when the regular school of medicine would not meet in consultation, any physician who practiced any of the other so-called systems of medicine. But the "times have changed, and we have changed with them." Now universal custom, if not the code, seems to make but one requirement, and that is, that the physician shall have been "licensed to practice by the State Examining Board," whether he be allopath, homeopath, eclectic or what not.

Whether this change shall prove to be in the true interest of scientific and rational medicine, remains yet to be seen. I am willing to confess that it seems to meet the humanities of the case, at least, and this is a matter of no small concern when we stand in the presence of sickness and suffering and death.

We hear much in regard to the different systems of medicine: in my humble judgment there can be but one system; this embraces every end, every means, every remedy, known to the Healing Art, which has for its object the prevention, the alleviation and the cure of disease, no matter under what shibboleth it may pose. This system should be both scientific and rational, in so far as the present undeveloped state of medical science will permit. When to consult is a matter of no

little importance; it may be laid down as a safe rule that a consultation is never desirable, unless there is some real need for it, some question to decide, either of diagnosis or of treatment, or if the gravity of the case seems to demand it; then under any of these conditions it is legitimate for the attending physician to ask for a consultation. If the case is one of fair sailing, in which the diagnosis is clear, and the treatment plain, even though the patient be quite ill, if the physician can be competent, there will be little gained by a consultation.

As a rule a patient is safer in the hands of one competent physician, who has been in attendance through the case, and will remain with it, than in the effort to follow the advice of a consultant who sees the patient but once, prescribes, and departs to see him no more.

Useless consultation generally results in a compromise of treatment, which is hurtful to the patient; besides they injure the patient by seemingly magnifying the gravity of the case. Unless you can bring more wisdom into a case by a consultation, than you already have in it, you had better "tread the wine press alone."

Never call a consultation simply to please the neighbors, and because they have suggested it. Never favor a consultation simply as a luxury, because the patient can afford it.

Consultations are usually called at the suggestion and instance of either the attending physician, or of the patient, or his family. But this is not always the case, I have known consultations to be instigated by the neighbors, and outside parties, and these parties are generally working in the interest of some physician, not hesitating to mention his name to some member of the family, or friend, telling them of his wonderful exploits in some case similar to the one in point. These suggestions are not made through the attending physician, but directly to the family, leaving the physician in total ignorance as to the real reason why this particular physician has been suggested—and I have known instances in which this extraordinary physician, has had a hand in having himself called in. He generally covers up his tracks, so thoroughly that he cannot be traced—but not always so. This butting into a consultation is one of the most reprehensible performances which can be perpetrated by these gentlemen, who practice the "Black Arts" in medicine.

This same physician of remarkable record, who has never lost a case of pneumonia, or typhoid fever, or anything else, will not only butt into a consultation, but will completely supplant you.

If in a case of great gravity you should feel it your duty to communicate to the family your fears for the worst, letting them know that you are doing all in your power, and will continue so to do, yet you are frank to say, you believe nothing will do the patient any good, the chances are, when you go in some morning, you will find one of the "Grey Wolves," of the profession regularly installed in your case—you have simply been supplanted. The only explanation you will ever get is that you had *given the patient out*, and said you could do nothing more—who ever heard of any sensible physician giving a patient out, in the sense of abandoning him? A physician's obligation never ceases so long as life lasts.

It is a matter of congratulation that these wolves are scarce, still they exist, it is not difficult to recognize them, they are hungry for practice, they feed on the garbage of the profession, they have the visage and the stealth of the coyote. It is a shame that they should exist in the profession, in the twentieth century—they should be exterminated by offering a reward for their scalps, just as a reward was offered for the scalps of their prototypes who troubled the early settlers in our country.

When a consultation has been suggested by the family, it is the duty of the attending physician to give his cordial assent at once. He should remember "that all that a man hath will he give for his life." The patient feels that there is wisdom in counsel, whether there is or not—he realizes that one may suggest something which the other has overlooked, though both may be equally competent.

It is wonderful how many excellent medicinal measures are shelved away in a man's brain, and are forgotten, but may be brought to light by suggestion of another—and then we wonder how we could have overlooked the suggestion, with which we were perfectly familiar.

The patient feels grave apprehensions in regard to his condition—desires that everything shall be done for his welfare, and calls one whom he supposes can give valuable assistance in the case—such a consultant ought to be cheerfully called, and accorded the highest courtesy and kindness.

The patient does not always name the physician to be called in consultation, but leaves this to the attending physician and this is best. The physician in charge is the most competent judge of the qualifications of those he may desire to assist him. He knows the needs of the patient and should try to meet them in his consultant.

The physician in charge should never call in a consulting physician simply because he is *particular friend, and acquaintance*, unless such an one has the qualifications necessary to assist him as a consultant.

A consultation may be called in the interest of the physician. In these perilous times when damage suits seem to be the order of the day, it is sometimes well for the attending physician to call in a consultant, especially in cases of fractures and dislocations, for his own protection. Remember the *Devil's running mate*, the lawyer who takes a case one half for the other, without expense to his client, is standing on the street corners, and sitting in the market place ready to pounce upon you with or without provocation.

When a consulting physician has been called, whether at the suggestion of the attending physician or of the family, he should be received as a gentleman, and a confrere, and treated with courtesy and consideration.

To a right thinking physician, one devoid of suspicion and jealousy, this sharing of responsibility, brings no small amount of comfort, and help; to the self satisfied and self sufficient, it brings nothing but an attack of jealousy and sulkiness.

If you desire real benefit to accrue to yourself, or to your patient, meet your consultant cordially and cheerfully. If you bring nothing else to the sick room and the patient in a consultation, at least bring cheer and hope and sunshine—let it manifest itself in your voice, in your countenance, in the grasp of your hand.

When the time for a consultation has been appointed, never fail to meet it promptly, except for unavoidable causes; then make all necessary explanations, as soon as possible, and name some other date. A failure to meet a consultant promptly is a wrong to the other physician, and a wrong to the patient. Unless you are very intimate with the attending physician await his arrival before you make any examination of the patient.

The length of this paper forbids my going into detail of conduct of a consultation. The consultant should make his examination thoroughly, leaving no stone unturned in his effort to bring assistance to the patient. He will be short of his duty if he fails in this respect.

After examining the patient the consultation between the physicians should be entirely private. The case should be thoroughly gone over, and discussed in all its bearings, the consultants keeping continually in mind that they meet alone in the interest of the patient, and should not allow themselves to drift

into discussion of questions not germane to the case in hand.

Matters of diagnosis, prognosis and treatment having been settled, the results should be communicated to some member of the family, or to the patient himself, if the family desire it, both physicians being present. The treatment should go to the patient, and family, as the recommendation of both physicians, never as the advice of the consultant alone.

Directions as to treatment should be given to nurse or family, by the attending physician, unless he should desire the consultant to do it.

The consultant should hold no communication with the patient or members of the family about the case, unless the attending physician is present, this is important. Just here trouble often arises, the attending physician nightfully or wrongfully imagines the consultant does not always speak with the same voice to the family when he is not present, as when he is present.

If you agree with the attending physician in his diagnosis, prognosis and treatment, do not hesitate to say so. Do not feel it your duty to differ with the physician and to alter the treatment, lest you will not be considered as earning your money. Differ for a cause, never differ without one. Disraeli once said "a medical consultation is an occasion on which the consulting physician endorses the opinion of the consultant, but changes the treatment." Agree as far as you can consistently with the attending physician, without doing any harm to the interests of the patient.

If you find that you and the attending physician differ widely and cannot agree, or if you believe he has made any grave mistake, or oversight, tell him alone what you think about the matter; have a clear understanding as to your difference; if the welfare of the patient demands that the whole truth be told, then make your statement alone to the patient, or to some responsible member of the family in the presence of the attending physician. A third physician is sometimes called in to reconcile differences of opinion between consultants.

Protect the attending physician as far as you possibly can, make no unfavorable criticism of his conduct of the case to any one, indeed never mention your differences at all, unless the welfare of the patient demands it, and then only to patient or his family. Protect the consulting physician always to the limit of conscience, but the patient must never be allowed to suffer from withholding the whole truth. When a consultation is concluded,

arrangements should be made for the next visit of the consultant, provided it is thought necessary to have him see the patient again. This being done, the consultant should make his departure at once, never lingering to discuss the situation with the neighbors or with the family. He should never remain after the attending physician has gone.

The consulting physician should never consent to take charge of the case by the request of the family alone: it is doubtful if it should ever be done at all, but never unless by the earnest request and desire of the attending physician. The patient or his family sometimes call a consultation when the attending physician does not feel the need of one, and does not desire one, sometimes the family call in a physician whom the attending physician does not want. In this case it is the duty of the attending physician to treat the consultant with kindness, and courtesy. On these occasions the family physician has been known to make the consultant feel very keenly that he was not wanted; he is treated with scant courtesy, his questions are answered abruptly, he gives the consultant but little information in regard to the case, and embarrasses him in every way. When it comes to suggesting treatment, the attending physician objects to everything proposed, claims to have tried all the remedies suggested by the consultant, and after the consultant has exhausted the entire *Materia Medica*, he finally brings the attending physician to a stand, and gets an agreement to try certain remedies—the consultant leaves—the attending physician deliberately pockets the suggestions, and the patient gets absolutely no benefit from the consultation. The patient and his family are left under the impression that the treatment suggested by the consultant and agreed upon is being carried out, when nothing of the kind is being done.

There is another evil under the sun, which should be condemned. Occasionally the family suggest the name of some modest neighborhood physician, may be a man, slow of speech, plain, unassuming, but with excellent attainments, who has quite a local reputation. He has been called contrary to the wish of the attending physician, he is not considered by the attendant his equal professionally. I have known such a man snubbed, and treated with marked discourtesy. This is all wrong. The consultant is not to blame for being called in, and it is your duty to treat him with every consideration. His suggestions should be cheerfully received, and accorded consideration, and if they are helpful should be adopted. Very humble practitioners are frequently most excellent physicians,

men of great experience, and of great common sense, and are not incapable of making very helpful and valuable suggestions. Remember that wisdom is not alone found in the towns and cities. It was a "Hebrew Lad" from an obscure country district, who with pebbles taken from a neighboring brook, brought down the giant who defied the armies of Israel. Ephraim McDowell was not far removed from a country doctor.

Whenever a physician, be he attendant or consultant, feels that he is the sole embodiment of medical wisdom, and that none can be found who is capable of rendering him any assistance, right then and there, you have a case well nigh ready for the "fool killer."

If physicians when they meet in consultation would ever be kind and courteous and generous, frank and honest toward one another, forgetting self, then there would be no place for envy, jealousy, dissension, bitterness. Remember that "charity suffereth long and is kind; charity envieth not, is not puffed up, doth not behave itself unseemly."

The chief object of this paper has been to point out the dangers and the difficulties which confront the medical profession when they meet as consultants, and which so frequently end in dissension and bitterness and discord, and to point out how these dangers and difficulties may be avoided. My object has been to promote good will and fraternal feeling among the medical profession of our own State and country.

I have been impelled to this by the feeling, that there never was a time in the history of the medical profession, since its advent in the world, when there was such a crying need for peace and good will, as to-day. In my humble judgment we are standing on the threshold of the greatest advance in medical science which the world has ever witnessed.

The marvelous progress of the past quarter of a century is but an earnest of the future, which seems to beckon us on. The spirit of progress seems to be in the air. Everything indicates that we are upon the verge of a new era in medicine. Nothing can stay our progress, if we be but true to ourselves, united, unflinching, unfaltering.

Twenty years ago, at Mt. McGregor in New York, there lay dying, one of the greatest captains of modern times, General Ulysses S. Grant. — he was so impressed with the general good feeling which was manifested toward him, by the entire people from every section of our common country at a time when every word was supposed to be his last, that he was moved to say, "I feel that we are on the eve of a new era, when peace and good

will shall prevail throughout our land, once separated and embittered by strife. I cannot stay to be the living witness to the fulfillment of the truth of this prophecy, but I feel within me that it is so." Now I occupy no position of prominence in the medical profession, and am not entitled to speak with the emphasis, and inspiration of the distinguished General, and yet I feel within the depths of my soul that we stand to-day upon the verge of a new era in the medical profession, and while I cannot stay to be a witness of the fulfillment of this prophecy, yet I feel within me that it is so, and I rejoice that I have been even permitted to catch a glimpse of the dawn which precedes the resplendent glory of the high noon, which awaits those of you who shall be spared to see the close of the next quarter of a century.

Nothing can stay the coming, if only harmony and good will shall prevail throughout our ranks. Then with peace, and progress, inscribed upon our banners, let us move forward to victory.

SOME OBSERVATIONS OF EUROPEAN SURGERY.*

BY OSCAR E. BLOCH, A. M., M. D., LOUISVILLE

It is often asked whether a trip abroad really benefits one—speaking, of course, from a medical standpoint. My reply to this is not unique, I can only say, with every one else, that there are good and bad surgeons everywhere, that one learns by seeing the good, and profits by seeing the bad.

Lisbon, the meeting-place of the recent Medical Congress, was of course on medical dress-parade, and the visitor could hardly form an idea of normal conditions in the hospitals or in the sanitary conduct of the city. One sees there on the streets many sufferers from facial lupus and epithelioma, and I enjoyed very much an X-ray and Finsen ray clinic, where really wonderful cures were exhibited.

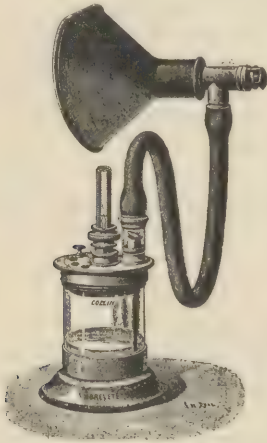
In Paris I was surprised to find so few Americans, for the opportunities there of doing work and seeing work are unsurpassed, and the pleasure shown by each professor when your card is presented makes it plain that your welcome to his department is genuine. There are wonderfully clever men in Paris, and I have only to name Guyon, Pozzi, Delbet, Tuffier, Fabre, and Doyen to remind you that Paris is really a medical center.

The same questions confront these men that confront us. Great thought is being given to the perfection of technique, the use of a suit-

*Read before the Kentucky Medical Association, Owensboro, October 10, 1906.

able suture material and the selection and administration of the anaesthetic. I was struck by the fact that chloroform is the anaesthetic generally used in Paris.

I have here a simple portable apparatus for giving chloroform, much used in Paris. It was invented by Professor Ricard, surgeon to St. Louis Hospital, who very kindly gave the chloroform while his assistant performed an operation, in order to show me how to use the apparatus. The mask fits air tight on the face, and all the air breathed comes through the apparatus, either pure or contaminated with chloroform in the proportion desired by the anaesthetist. Dr. Segui O'Brien has used this apparatus at all of my operations since my return, and both he and I are well pleased with it, less chloroform being necessary when



CHLOROFORM INHALER OF RICARD.

it is used, the stage of excitement being avoided, and vomiting being materially decreased. In removing an uterus accompanied with enormous pus tubes, the patient was on the table one hour and a half and only three ounces of chloroform were used. To my mind one of the greatest advantages of this apparatus lies in the audible click of the valves assuring the surgeon that his patient is breathing.

The Roth-Draga method of mixing chloroform with oxygen is also used in Paris. The apparatus is very unwieldy, is not portable, and can therefore be used only in institutions. It consists of a tank of oxygen with outlet under complete control of the anaesthetist; and of the chloroform, which by means of a movable dial is dropped into the passing oxygen, at a rate varying from five to seventy-five drops per minute, and carried to an oil-skin or rubber bag, out of which the patient breathes. The dial showing rate of chloroform is in full view of the operator, and the bag, by its collapse or dilation, shows the depth of inspiration.

I saw Tuffier do an operation by means of

spinal anaesthesia. Although Bier introduced spinal anaesthesia to the world, Tuffier without doubt has done more in this line than any one else. He uses Stovaine, which has the advantage over cocaine of being sterilizable in solution. His method of using it is the same as that employed in the case of cocaine, namely: the patient sits on the table and bends forward, thus increasing the space between the spinal processes, and the needle is introduced on a level with the iliac crests into the fourth intralumbar space. The motor branches of the nerves are not affected by Stovaine, and this is of great advantage, particularly in tendon transplantation. The anaesthesia begins seven to ten minutes after the injection of the drug and continues 30 to 45 minutes. The after effects of Stovaine are not so unpleasant as those of cocaine. Tuffier told me that very few of his patients suffer from the headache, nausea, and depression so characteristic of cocaine. He does not use spinal anaesthesia in laparotomies, because often an enlargement of the incision would go beyond the field of anaesthesia.

Kocher of Berne impresses me as being the greatest living surgeon. He is so original in method, and obtains such splendid results that I do not hesitate to give you in full his technique. The patient has a full bath, and the site of the operation is shaved and scrubbed with ether and alcohol the day before the operation, and a protective dressing applied. On operating table, the field of operation is again scrubbed with soap and water and then sponged with ether and alcohol. Kocher's rule for cleansing the hands is not to wash so many minutes by the clock, but to wash, and wash, until the hands are cleaned. He declaims particularly against long nails, and says that the surgeon's nails should be always so short that the hand brush can clean the space under them. His brushes are kept in bichloride solution. After the hands are cleaned with the brush and soap, the soap is washed off under the tap of running water, then 85 per cent. alcohol is used with a brush and every part of the hands and arms is scrubbed thoroughly. A gargle of 2 per cent. carbolic is used. During the operation he and his assistants wash their hands in 1 per cent. lysol, followed by alcohol. Rubber aprons and shoes are worn under sterilized linen aprons. The instruments are boiled, and the dressings are sterilized by steam at a pressure of 125 pounds. The operating room has been cleaned with a hose and left wet. The patient is placed on a table with a warming-pan arrangement in the top. Rising above the patient's head is a loop of strong wire, holding a sheet which prevents the ex-

pired air from reaching the field of operation.

Kocher has two operating rooms—septic and aseptic. He uses white cotton gloves in aseptic operations and puts on rubber gloves when directing his assistant in septic ones. From this, his opinion on the subject of gloves can readily be seen. All the assistants at an aseptic operation wear cotton gloves, which are removed when saturated with blood. The hands are washed and a fresh pair of gloves pulled on.

He uses silk for ligatures and sutures in all clean cases, and never has the slightest trouble. The silk is small and twisted, and he often doubles it when the size of the vessel warrants. His method of preparing silk is as follows:

12 hrs. in ether.

12 hrs. in alcohol.

10 minutes boiled in 1 per cent. bichloride.

Rolled on glass spools (sterile hands.)

Boiled again 10 minutes in 1-1,000 bichlor., before the operation.

Catgut is used only in septic operations.

His dressings consist of a layer of gauze scaled with collodion, and I saw a gastro-duodenostomy so dressed get well without an unfavorable symptom. Kocher has now a record of over 3,000 goitre operations, and a visitor can always see one or two any day. He is now devoting himself to operating on cretins, but he says that his statistics do not yet comprise enough cases to be valuable.

The most interesting medical man in Europe just now is Professor Bier, of Bonn, who has just brought out the third edition of the book "Hyperaemia as a Curative Agent." His plan of treatment is based on ideas that are exactly opposite to those generally held on the subject. For instance, he says that the increased amount of blood in any inflamed area is an attempt on the part of the animal economy to crowd out the enemy, to nourish the injured part sufficiently to enable it to resist the toxins and to overpower the germs creating them. He argues that the hyperaemia should be increased, thereby improving the fighting quality of the part.

His book gives in detail his method of producing hyperaemia in different parts of the body, and also gives much information as to the diseases which have proved amenable to treatment in this way. The book will soon appear in English, and I will not waste your time in too full an account of its contents. I shall only call your attention to these two little cupping-glasses, which I have brought along to show you. One is to be used in tonsillitis, the other is for carbuncles and boils.

Bier has designed many such glasses, for

the different parts of the body. I have had opportunity to use the larger of these on a patient who had two enormous boils, and I can confirm Bier's statement in this case at least, that the pain was greatly diminished, the pus was satisfactorily extracted through a very small opening, and a cure was effected in a very short time.

Bier makes use also of hot air to produce an active hyperaemia for the treatment of ankylosis, and gonorrheal and chronic rheumatism. He speaks at great length of surgical tuberculosis, and cites many cases which he relieved absolutely. In fact, tuberculosis was the first condition to which he applied his ideas, having had his attention called to it by the statement contained in Frerich's report of the Breslau Clinic of 1853. This statement was to the effect that patients suffering from stenosis of the pulmonary artery, and having a consequent pulmonary anemia, contracted pulmonary tuberculosis and died of it, whereas immunity against pulmonary tuberculosis was the heritage of the unfortunates suffering from such diseases of the heart as caused pulmonary congestion. I shall not carry you through his experiences which have developed the present mode of treatment, but shall say only that he produces a passive hyperaemia by means of thin rubber bandages, such as I have here. The bandage must be carefully adjusted so as to interfere with the venous circulation only, the heat of the part should be retained or increased, and deep oedema must not be caused. The duration of the treatment must be determined according to the individual patient, and use of the part must be restricted. Mastoiditis is treated with a bandage around the neck, and in order to show the possibility of this, Bier put it on himself, and slept several nights comfortably with it around his neck. I have been at home so short a time that I have not a sufficient number and variety of cases to make an interesting report, but I have under treatment a patient with an ulcer on the leg, and one with tuberculosis of the hand, both of whom I am treating by means of the passive hyperaemia, caused by the elastic bandage. Both show signs of improvement, and both say they are relieved in a great measure of pain.

The investigations in lung surgery are still in the experimental stage. There are two opposing ideas being worked on: Seuerbruch has his pneumatic cabinet, by means of which the lung is opened in a diminished air pressure, and Kuhn, by a modified Dwyer intubation apparatus, increases the intra-pulmonary pressure.

TREATMENT OF HEPATIC ABSCESS BY ASPIRATION AND SIPHONAGE.*

BY O. H. REYNOLDS, M. D., FRANKFORT.

Having ascertained the presence of pus, what is the next step? There are two courses open—one is to reach the pus by a "cutting" operation, another by "trocar and canula." I have thrown in my advocacy with the latter method, and as my experience increases, the more convinced am I that for deep-seated abscesses of either the supra- or intra-hepatic variety, it is far better. It will be noted that the arguments which I subsequently advance are in connection with deep-seated liver abscesses and not abscesses which actually bulge either toward the abdominal wall or at the ribs, so that the pus is close to the surface. The abscesses have in this instance been left so long that the pus has burrowed its way to surface; and the so-called operation for liver abscess is merely setting free sub-cutaneous pus. Therefore, I debar all treatment of such advanced abscesses being considered as operation for liver abscess. Nature has in this instance saved life—not the surgeon who has done his best to sacrifice it, for the abscess should never have been allowed to advance so far. With abscesses allowed to attain such unjustifiable proportions, it matters not which operation is undertaken, and cutting is perhaps the better. With such subcutaneous collections of pus, I am not dealing; but with deep-seated pus which does not bulge either toward the anterior abdominal wall or toward the right lower intercostal spaces. The chief argument against the employment of the trocar and canula is that it is unsurgical, whatever that may mean; and the advocates of the use of the knife declare that any other method is "timid surgery,"—that they like to look their enemy in the face. These are not scientific arguments, but mere statements in favor of surgical braggadocio. My chief objections to "cutting" operations are; the severity of the operation is calculated to cause a practitioner, especially if he is single-handed as often happens in the country, to defer it until too late in the disease. To cut down by way of the chest, the pleura, the diaphragm and the peritoneum, to reach a (suspected) abscess of the liver, is a line of treatment that the patient if he knows anything of the operation contemplated is apt to shrink from, and even the medical practitioner prefers to try every available resource before con-

demning his patient to so severe an ordeal. This hesitancy to perform a laparotomy or a transthoracic operation may cost the patient his life, and is one of the chief causes of high mortality attending liver abscess operations.

Again, hepatic abscesses occur for the most part in tropical countries, where skilled help may not be available, where trained nurses are unknown, where appliances for surgical proceedings of the cutting kind may be few, and where therefore "heroic" operations do not commend themselves and can be undertaken only at great risk to the patient. Cutting operations either by transthoracic or by laparotomy methods are "over heroic." There is no necessity for submitting the patient to so severe an ordeal. Neither practice nor results justify these heroic measures, and I have no hesitation in declaring against them. The men whose opinions I most value in this connection, as well as my own experience, declare in favor of milder methods; and even though I may be accused of surgical cowardice, I still believe that I am doing the best for the patient. Operation by trocar and canula and subsequent siphon drainage. Where a liver abscess is suspected, pus ought to be sought for without delay. This is done by introducing the hollow needle (not longer than four and a half inches) of an aspirating syringe, or a needle of an aspirator, into the liver. If pus be not found at once, the needle may be inserted again and again—say six or more times—into the liver in different parts. In my opinion pus ought not to be sought for unless the surgeon is prepared to operate at once. Should pus be formed, it is customary, first to locate it and then ask for a surgeon to operate at a later date. This is dangerous and unjustifiable procedure. If the physician wishes a surgeon to operate, the latter should be at hand ready to operate the moment pus is discovered, for, were a thin walled abscess near the liver surface to be pricked in one or more places by the needle, the pus might quickly escape into the peritoneal cavity. Even after pus is found, it is best to introduce the needle in one or two other places in the vicinity, in order to ascertain the "lay" of the abscess, so that it may be drained from the lowest part. Never introduce the same needle by which pus has been found into another part of the liver, or, at any rate do not reintroduce the needle until it has been sterilized. The reason is obvious. When the abscess has been found, incise the skin at the seat of the needle puncture for about three quarters of an inch to admit the trocar, and the trocar and canula to be used should be

*Read before the Franklin County Medical Society at its October meeting, 1906.

not less than one-third of an inch in diameter and have a stem four and a half inches in length. Plunge the trocar and canula into the abscess, maintaining the direction traveled previously by the hollow needle, withdraw the trocar and stop the flow of pus through the canula by placing the thumb over its mouth, as it is unnecessary at this stage to allow the abscess cavity to empty itself completely. Through the canula, introduce a rubber tube half an inch in diameter, and six inches long; this may be done by stretching the tube upon a metal rod with a small end hook at one side in which the rubber tube is caught, so that it can be stretched, and the tube has of course several holes cut into it at the end intended to be introduced into the abscess. When the tube and rod in which it is stretched touch bottom of the abscess cavity, withdraw the canula over the stretched tube, and then allow the tube to contract toward the bottom of the abscess cavity, withdraw the canula over the stretched tube, and then allow the tube to contract toward the bottom of the abscess and remove the metal rod. The drainage tube is now in the abscess and some four or more inches project from the side of the patient's chest. The tube may be cut short, but I prefer to have it long and establish siphon drainage by inserting into its projecting part one end of a piece of glass tubing of suitable size and three or four inches long, the other end of which fits tightly into a rubber tube of sufficient length to reach the bottom of a bucket standing by the side of the bed, and the bucket should contain enough carbonized water to cover the outlet of the tube, and into this the pus drains. A weight ought to be attached to the lower end of the tube to prevent slipping or displacement. The operation is completed by stitching the tube to the skin where it issues from the chest, and covering the wound around it with wet antiseptic gauze. The subsequent treatment consists in keeping up the drainage until the fluid that flows as seen through the glass tube is no longer purulent or flocculent, but merely bile stained. If at any time pain in the shoulder or side is complained of, raise the bucket off the floor until it is nearly on level with the bed. This lessens the severity of the siphonage, which probably caused the "drawing" pain. As pus disappears, stop drainage and shorten the tube, reducing its size as the discharge gradually ceases.

COUNTY SOCIETY REPORTS.

Anderson—The Anderson County Medical Society met at the office of Dr. Toll. The meeting was called to order by the Vice President, Dr. Murdock.

The committee appointed at the last meeting reported a resolution on protection against "Professional dead-beats." The resolution was adopted unanimously:

We, the members of your committee appointed at our last meeting to devise some means how we should protect ourselves against the dead beat beg leave to report as follows:

Resolved That we, the members of the Anderson County Medical Society will not accept the patient of a brother physician unless he has been paid in full for his former services and the patient holding a receipt in full for the same, given within 30 days (last and past) and that these resolutions be and are binding on us all on and after Monday, March 4th, 1907.

C. M. PAYNTER,
JOHN MURDOCK,
G. D. LILLARD,

Committee.

Another resolution was introduced by Dr. Murdock and passed.

Resolved, That we, the members of Anderson County Medical Society view with horror the increasing tendency on the part of the medical profession towards the performing of criminal abortions in the state of Kentucky, therefore, be it

Resolved, That we hail with delight the action the State Board of Health has taken and we hereby pledge our support to the board and will bring to its notice the name of any physician (or any one else) who may attempt to have a criminal abortion performed on any female in this State and we will assist the board to the utmost of our power in having the certificate of such party, to practice medicine or midwifery revoked, and we hereby pledge ourselves to report every case of this kind that comes to our notice in the practice of our profession.

After some remarks by Dr. Toll on "Newspaper notoriety" as pertaining to physicians, Dr. Davis made a motion that a committee be appointed to wait on the editor of the county paper and request him not to publish the names of physicians in connection with any of their cases that might be written up.

Motion seconded by Dr. Paynter and passed and Drs. Davis and Toll appointed on the committee.

No programs having been sent out by the Secretary, Dr. Murdock gave an interesting resume of a case of "Diabetic Gangrene of Limb, complicated with Infantile Paresis."

Dr. Murdock amputated this limb with Dr. Johnson's assistance under very trying circumstances and got an excellent result.

All the doctors present engaged in the discussion and complimented Dr. Murdock on his excellent handling of the case.

Society adjourned to meet at the office of G. D. Lillard on March 4th next.

J. W. GILBERT, Secretary.

Barren—The Barren County Medical Society met at Glasgow Feb. 12th. The house was called to order by the President, C. W. Froedge. Members present:—C. W. Froedge, R. S. Plumlee, W. T. Britt, J. C. McCreary, R. E. Garnett, J. M. Taylor, R. H. Porter, W. S. Blakeman, A. G. Holmes, W. T. Wells, S. T. Botts, J. S. Leech, J. B. Honeycutt, W. H. Coombs, W. C. Smith, Joseph W. Wood, C. G. Depp, and C. E. Carden. The visitors present were:—A. T. McCormack, E. Rau, of Bowling Green, and W. W. Bowling, of Camner.

Some interesting clinical cases were reported, after which the Society dispensed with the regular program and heard speeches from our distinguished visitors. The first to respond was Dr. Rau, our District Councilor, who spoke at length with propriety on the work of our county societies, the work they are doing and the work they ought to do. The next speaker was A. T. McCormack, who rehearsed a few of the remarks mentioned by Dr. Rau, but dwelt more particularly upon the sanitary conditions of our towns, and the patent and the proprietary medicine evil, these last, of course being particularly interesting in that most of them have proven to be absolute fakes.

Dr. McCormack strengthened our faith in the fight against this great evil for which we are almost wholly as a profession to blame, on account of information. What an awful sin is ignorance! At the close of Dr. McCormack's address, the Society adjourned in a body to the home of Dr. Garnett, where a bountiful repast awaited them. Talk about dinners! never did a Society sit to a better one. King, prince, potentate, or any other power, certainly should have felt honored to sit at such table. The Society can not express in language the feeling that this dinner carried with it. Not only was the quality of the finest, but the quantity was something after the style of the loaves and fishes; the farther we went the bigger it got. Suffice it to say it was served not only in modern style, but with the finishing touches attached, such as Mrs. Mattie Garnett and her beautiful and accomplished daughter, Miss Lucy, wife and daughter of Dr. R. E. Garnett, are exceptionally capable of doing. Now the main feature. "The gift without the giver is bare." Not only was the dinner

splendid itself, but the spirit of fraternity shown by Dr. Garnett and his family in serving their guests was a lesson in modern medical feeling. This is a day long to be remembered by the Society.

The afternoon session was one of interest in that it was spent principally in listening to a speech by W. W. Bowling, of Camner, entreating the young members of the profession to profit by his mistake, and charge and collect enough that they may acquire a competency, and not be left in want in old age, thereby losing the respect of those for whom they have given their time and talents. Everyone manifested deep concern in the speech of Dr. Bowling, it being so practical and emanating from the lips of one so pure in heart, honest in purpose as our esteemed brother and friend—a typical old "Kentucky Gentleman;" and what more honor could be conferred.

Brethren, a day spent occasionally in a social way has its fruits.

R. S. PLUMLEE, Secretary.

Casey—The Casey County Medical Society met in Liberty on January 27th. I. S. Wesley read a paper on "The Differentiation between Lobar and Catarrhal Pneumonia" which showed that the author had made considerable preparation for the subject. It was discussed by J. T. Wesley and D. S. Floyd. D. S. Floyd read a paper on "Subjective Therapeutics" which was appreciated by all present. J. T. Wesley reported four cases of diphtheria, which was discussed by I. S. Wesley and D. S. Floyd.

The following officers were elected for the ensuing year: President, Pierce Martin, Clementsville; Vice President, I. S. Wesley, Liberty; Secretary-Treasurer, L. F. Hammond, Dunnville, re-elected.

The committee reported the following program for next meeting: "Lobar Pneumonia," W. T. Garvin; "Catarrhal Pneumonia," O. Dunham; "Scarlet Fever," Pierce Martin; "When Should Obstetric Forceps Be Used," P. S. Humphrey.

J. M. HANEY, Secretary pro tem.

Fleming—Whereas, many of the old line life insurance companies have reduced the medical examiner's fee so that the maximum fee for making examinations of applicants for \$3,000.00 and less is \$3.00, and as the physicians of Fleming County deem this action unjust, unfair and derogatory to their financial interests, therefore be it

Resolved, That the members of the Fleming County Medical Society with all other physicians of this county, agree to adhere to and comply with a fee bill rate of \$5.00 for making all and any life insurance examinations. That any ar-

arrangement for increase of fee to \$5.00 per examination, made between the medical examiner and agent shall not be accepted, but that the special arrangement must be made between the medical director of the company and the medical examiner.

Resolved, That the Secretary of this society obtain the signature of each and every physician of this county to this resolution, and that a copy of this resolution with the signature of all the physicians be sent by him to all the companies that have made a reduction in the medical examiner's fee.

Chas. R. Garr, John C. S. Brice, A. M. Wallingford, Jr., A. M. Wallingford, Sr., S. F. O'Brien, A. S. Robertson, T. B. Vice, J. B. O'Bannon, H. C. Kehoe, W. H. Conway, W. J. Morgan, W. B. McClure, H. H. Morgan, E. T. Runyon, Walter W. Fugit, Jno. A. Minish, W. W. Dye, Archibald L. Morford, James Thompson, H. B. Myers, T. Ribelin, H. S. Gilmore, R. M. Skinner, J. S. Hood, W. G. Armstrong, R. H. Yantis.

Franklin—The Franklin County Medical Society met to-day in regular session in the office of Williams, Garrett & Martin; N. M. Garrett, President, in the chair, the following members being present:—N. M. Garrett, J. R. Ely, U. V. Williams, E. E. Hume, Flora Mastin, W. B. Dawson, J. P. Stewart, L. T. Minnish, J. W. Hill. The regular Essayist, G. F. Thompson being absent, J. W. Hill, of the Kentucky Feeble Minded Institute was requested to make an extemporaneous talk on the Mental Defectives and Degeneracy. The subject was discussed at length by J. P. Stewart, of the "Stewart Home," E. E. Hume, J. R. Ely, and W. B. Dawson. U. V. Williams reported a recent case of Spina Bifida. J. R. Ely was re-elected Censor for a term of three years, and U. V. Williams, W. B. Dawson and J. W. Hill were appointed as a Committee on Public Health and Legislation. It was determined by the Society to hold an open session in the near future and a cordial invitation to the public to attend was ordered prepared and printed. J. N. McCormack was urgently invited to be present and address the Society on that occasion.

J. W. HILL, Secretary pro tem.

Henderson—The Henderson County Medical Association met in the office of Dr. Wilson, January 28, Dr. W. S. Forwood, President, Dr. Silas Griffin, Secretary. Present, Drs. Edwards, Letcher, Armstrong, Bethel, Wilson, Forwood, Dunn, Poole, Ligon, Moseley and Griffin.

Minutes of previous meeting read and approved.

CLINICAL CASES

Dr. Letcher reported a case of compound com-

minuted fracture of the lower jaw in a man, age 70, which was discussed by Dr. Bethel.

An amendment to Chapter V, Sec. 1 and 2 of the By-Laws raising the membership fee and annual dues from \$2.50 to \$3.00 was proposed and read and ordered to take usual course.

W. M. Hanna and Ben Letcher were elected on motion honorary members.

Dr. Letcher read a communication on Medical Legislation.

PAPERS.

Dr. Poole read a paper on "Coma," defining it as a condition of insensibility in which it is impossible to arouse the patient, coming on suddenly or gradually and gave a number of causes. He gave differential diagnosis of coma from opium poisoning, alcoholic poisoning, apoplexy, uremia, epilepsy, hysteria, and from diabetic coma.

Dr. Armstrong, in his initial effort read a crisp paper on "Hysteria," defining it as a functional nervous disease, confined mostly to females and occurring mainly at menstruation and the menopause.

Dr. Wilson read a well-received paper on "Neurasthenia," which he defined as a nervous disease pure and simple, with the most probable cause, abuse of the digestive tract, though recognizing eye strain as a contributing cause.

The papers were jointly discussed by all of those present.

W. S. FORWOOD, President,
SILAS GRIFFIN, Secretary.

Henry—The Henry County Medical Society met in Newcastle Monday, January 28, 1907, with the following present:—A. P. Dowden, W. L. Nuttall, A. Wainseott, O. P. Chapman, E. E. Beckers, Webb Suter, R. W. Porter, W. F. Coblen, J. P. Nuttall and Louis Coblin, President.

The Insurance Committee made a final report which was accepted and committee discharged. The report was ordered sent to the Journal.

The Society consumed the greater part of the afternoon in discussing the business of the Society. There were several clinical cases reported and discussed.

E. E. Bickers and Everett Morris were elected to membership.

Paper for next meeting—Anatomy and Pathology of the Heart, R. W. Porter; Kidney Diseases and Their Relation to the Heart, A. P. Dowden, and a paper without title by E. E. Bickers.

Society adjourned until Monday, February 25, 1907.

JOHN P. NUTTALL, Secretary.

Your Committee on Insurance has carefully considered the subject of medical examinations and the reduction of fees, proposed by certain

of the old line companies, and submits as its report the following preamble and resolutions:

Whereas, The legislation resulting from the investigation intended to cure evils existing elsewhere was at once seized upon as a justification for a long premeditated, concerted and systematic plan for debauching these departments by lowering the standards and compensation for medical examiners, employing and importing into every section recent graduates and men who have failed in practice, as well as representatives from the lowest grades in the profession, thus destroying what has always been recognized as a fundamental safeguard in sound life insurance; and

Whereas, While nothing could justify such a short-sighted course the official reports of the income and expenses of the insurance business in this State and the country at large, last year and during all of its history, and the facts in regard to the recent legislation in New York make ridiculous the plea that the action was necessary in the interest of economy or was caused by such legislation. Now, therefore, be it

Resolved, By the Henry County Medical Association and the doctors of Henry County, That this organized and concerted attempt to lower the standard and compensation of medical examiners all over this country is not only most unjust and degrading to our profession, but is so unsound as a business proposition that it can not but ultimately prove most expensive and dangerous to all policyholders in these companies, made up of our patrons and ourselves:

Resolved, That a large experience having demonstrated that the thorough and painstaking examination of every applicant for insurance can not be made for less than five (\$5.00) dollars, we, the undersigned, agree that this amount be fixed as the minimum fee, and shall be binding on all doctors in Henry County, on and after January 1st, 1907.

John P. Nuttall, Jr., S. P. Oldham, W. B. Oldham, W. L. Nuttall, A. Wainseott, Owen Carroll, I. W. McGinnis, J. C. Cassity, C. R. Martin, F. D. Hancock, A. P. Dowden, R. W. Porter, O. P. Goodwin, George M. Jessee, C. J. Renfro, A. G. Elliston, A. J. McNeese, D. A. Adams, Wm. J. Morris, E. Bishop, W. T. Coblin, Louis Coblin, W. L. Vories, J. W. Houston, O. P. Chapman, E. E. Bickers, C. J. Landeman, O. B. Humston, O. M. Humston, Webb Suter, A. M. Zaring, Walter Lester.

Henderson—The Henderson County Medical Association met in its regular semi-monthly meeting February 11th, in the office of Secretary Griffin, with Dr. Forwood presiding and Drs. Bethel, Dixon, Quinn, Moss, Stone, Wilson, Moseley, Vaughn, Poole, Graham, Dunn, For-

wood and Griffin present.

Applications of O. G. Jones, Smith Mills, and W. U. Neil, Henderson, were read and referred to the Board of Censors for report at next meeting.

A communication from the American Medical Association complimenting our course of work outlined for 1907 was read as follows:

Dr. Silas Griffin, Secretary Henderson County Medical Society, Henderson, Ky.—Dear Doctor:—We have just received from Dr. McCormack one of the outlines of work for your Society for the coming six months, and we want to congratulate you on the plan of study you have drawn up. This matter of post-graduate course is just taking form and it remains to be seen what will be the best plan of work, but such work as your Society and a few others is doing is of great value in marking out the path for others to follow. I shall appreciate it, if you will send me at any time any of the notices or publications of your Society. Very truly yours,

AMERICAN MEDICAL ASSOCIATION.

FREDERICK R. GREEN,

Assistant to the Secretary.

A communication from the Secretary of the State Society calling attention to the necessity for the support of the Society by the payment of dues and by keeping up the insurance and patent medicine fight was read and filed.

Inquiry was made as to what had been the result as to the action in regard to the refusal to examine for old line companies for less than five dollars.

All the doctors present expressed their adherence to the rules of the Society and some reported that they had been discontinued as examiners by the companies who still maintain the three dollar fee. Some companies writing—"Regretting the necessity of accepting your resignation."

The second reading of the Amendment to Chapter V, Sec. 1 and 2 of By-Laws, raising the membership fee and annual dues from \$2.50 to \$3.00 was heard. Having taken the usual course, on vote was unanimously carried.

On motion Dr. Moseley duly seconded. That a fee of five (5) dollars be charged for examinations for fraternal as well as old line life insurance. On motion tabled until next meeting.

PAPERS.

Dr. Dixon read a most excellent paper on "Cerebro-Spinal Meningitis" in which he said the disease was caused by the diplococcus intracellularis; it affects childhood and adolescence preferably, though no age is immune.

The portal of entry is yet in doubt. This discovery is of the utmost importance, since it holds the key to the transmission of the malady.

This knowledge is necessary to proper efforts at prevention.

The diagnosis is difficult in sporadic cases, but not so much so in epidemics. With other cardinal symptoms, the diagnosis is to be regarded as certain, when the presence of the meningococcus is discovered in the cerebral fluid obtained from a lumbar puncture. The treatment is unsatisfactory, a large per cent. dying in spite of all our efforts.

Dr. Griffin read a paper on "Infantile Spinal Paralysis" or Acute Poliomyelitis describing it as a rapidly developed inflammation of the grey matter of the anterior horn of the cord, occurring suddenly in children, characterized by acute onset, febrile reaction, early and extensive loss of power, followed by a spontaneous improvement, which is considerable except in certain groups of muscles, which remain permanently paralyzed and undergo rapid and marked atrophy. It is caused by some micro-organism as yet undiscovered and causes more paralysis in children than any other one trouble. The early recognition, and proper treatment, mechanical and otherwise, is important, for more can be done in this than in most diseases to prevent resulting deformities to assist the paralyzed to regain their normal use.

DISCUSSION.

Dr. Quinn: In my experience cerebro-spinal meningitis occurs in points remote from each other, and without visible connection, or the intervention of travel. In the epidemic in Webster County in 1887-8 whole families died and the people were panic stricken, and various types were seen. The people affected in this instance lived in a creek bottom, where the timber had been cut, there were many saw mill sites; the remaining brush and debris had been left uncleared and the channel of the creek was left blocked. The occurrence, as in most other cases was after a severe winter.

In this and in the epidemic in our own county nine years ago the mortality was great, death occurring in a few days or a few hours, recovery taking place only after long interval, leaving the patient emaciated and feeble both in mind and body.

Dr. Stone: There are some differences in regard to the theory of infantile paralysis which affect the treatment. The old theory was that certain centers controlled the whole nerve supply to the muscles. Now it is generally believed that each nerve fibre has a center of its own. Some centers may be destroyed which affect certain nerve fibres in a limit while others may be unimpaired, thus impairing the usefulness of the limb without destroying it entirely.

An effort to stimulate the nerve centers which have not been destroyed is beneficial, and foradic

and Galvanic electricity is indicated in the early stages, but very little benefit is to be expected after one year. In long standing cases prolonged treatment with static electricity with a mild current have given some good results and in this lies the hope of the future.

Dear Editor:—Our Society is doing splendid work, the old members are enthusiastic, and new ones are coming in. We are standing for the five dollar fee for old line life insurance examinations, and are telling the representatives of the various houses who call on us that we don't see their "ad" in the State Journal, and having them write into the "house" about the matter. Success to the Journal.

SILAS GRIFFIN, Secretary.

Knox—The Knox County Medical Society held its regular monthly meeting in the office of William Burnside, January 28th, 1907. Owing to the extremely cold weather and the bad roads there was only a very few of the doctors who lived in the country present. However we had a very pleasant and interesting meeting and every one went away feeling better for having been present and with a new resolve not to miss a single meeting for the year unless providence hindered. I am very glad to report that the "Insurance resolutions" (of which you were so kind as to send us copy) were unanimously adopted every doctor in the county having faithfully promised to stand by them.

The society also expressed its approval of the rejection of the "Penn Mutual's" proposition to pay \$3.00 for examinations of one thousand and less as the majority of examinations made by us are for one thousand dollar applications and we feel it an injustice to ourselves and the other companies to accept this proposition to the exclusion of others.

The following officers were unanimously elected for the year 1907: J. W. Parker, President; W. B. Dozier, Vice President, and J. S. Lock Secretary and Treasurer.

For the year we will hold meetings on the fourth Monday in each month, morning sessions at 10:30, afternoon at 1:30.

J. S. LOCK, Secretary.

Kentucky Midland — The forty-fourth quarterly meeting of the Kentucky Midland Medical Society was held in the County Court House at Lexington on January 10th. The meeting was called to order by the retiring president, W. B. McClure, and, in the absence of the secretary, J. E. Wells was elected secretary pro tem.

J. D. Kiser presented a man on whom he had operated for cataract of many years standing. W. E. Sleet read a paper on the Diagnosis of

Diphtheria which was discussed by Drs. Reynolds, Stucky, Kavanaugh, Cheatham, Wells, McClure, Kiser, Willis, Lapsley and Pratt. J. R. Fly read a paper on the Medical Treatment of Salpingitis. It was discussed by Drs. Barkley, Hill, Pratt and Bullock. The society then adjourned for dinner at the Phoenix Hotel.

The first business of the afternoon session was the reports of the committees. The Committee on Location announced that the next meeting would be held at Shelbyville on Thursday, April 11, 1907, and the Program Committee reported the following program for the meeting: A paper on High Arterial Tension by H. H. Roberts to be discussed by John C. Lewis, one on Chronic Endocarditis by J. W. Crenshaw, discussed by Frank Lapsley, one on Cystitis by George E. Davis, discussed by E. E. Hume and one on Trachoma by W. N. Offutt, discussed by J. S. Coleman.

A paper was then read by F. M. Beard on the Proper Treatment of Placenta Praevia and discussed by Drs. Barrow, Garrett, Cheatham, Sleet and Wells. The last paper was by J. E. Martin on the Diagnosis and Treatment of Incipient Tuberculosis. It was discussed by Drs. Clark and Sprague.

The election of officers for the year 1907 was then held resulting in the selection of the following: Charles W. Kavanaugh, Lawrenceburg, President; Nevil M. Garrett, Frankfort, Vice President; George P. Sprague, Lexington, Secretary and Treasurer.

On the motion of Dr. Beard a vote of thanks was tendered the local members for their entertainment of the society, which then adjourned.

GEORGE P. SPRAGUE, Secretary.

Meade—At the December meeting of the Meade County Society the following officers were elected: A. A. Baxter, Guston, President; J. L. Allen, Andyville, Secretary; T. H. Hardesty, Paynesville, S. H. Stith, Ekron, and J. F. Trent, Wolf Creek, Censors; B. R. Walker, Garnettsville, Delegate.

McCracken—The McCracken County Medical Society at its regular meeting January 2nd, 1907, unanimously adopted the following resolution: —Resolved, That the McCracken County Medical Society endorses the action of the Kentucky State Medical Association relative to charging a fee of \$5.00 for life insurance examinations, requiring a urinalysis, and that the Secretary be instructed to notify each member and ascertain his opinion on this important subject. The Committee on program assigned the members to subjects for the ensuing year as follows:

Anatomy—Drs. H. A. Smith, C. M. Sears, G.

A. Hamlet.

Physiology—Drs. L. E. Young, J. B. Acree, Ralph Holt, Leslie Rudolph.

Chemistry—Drs. C. R. Lightfoot, J. F. Dunn, W. R. Washburn, W. A. Moffett.

Bacteriology and Pathology — Drs. E. R. Earle, B. A. Washburn, H. B. Winters.

Pediatrics—Drs. Vernon Blythe, B. T. Hall, W. T. Graves, R. C. Gore.

Materia Medica and Therapeutics—Drs. H. D. Harper, J. D. Foster, H. B. Winters.

Practice of Medicine—Drs. S. Z. Holland, F. V. Kimbrough, J. T. Reddick, H. P. Sights, C. M. Sears.

General Surgery—Drs. Frank Boyd, J. G. Brooks, J. D. Robertson, R. E. Hearne.

Abdominal Surgery—Drs. P. H. Stewart, H. T. Rivers, W. J. Bass.

Obstetrics—Drs. B. B. Griffith, H. H. Duly, J. S. Troutman, Q. L. Shelton.

Gynecology—Drs. Delia Caldwell, R. D. Harper, J. T. Reddick.

Dermatology—Dr. C. H. Brothers.

Eye—Drs. H. G. Reynolds, H. M. Childress.

Nose and Throat—Dr. C. E. Purcell.

Ear—Dr. H. F. Williamson.

Genito Urinary—Drs. J. G. Brooks, L. Lyne Smith.

The post-graduate course adopted by the Society during last year was enthusiastically endorsed and by a unanimous vote it was decided to continue the work for the ensuing year.

This course of instruction was arranged per the following schedule for January and February:

Jan. 2nd—Papers; Dr. H. P. Sights; subject, Cerebro-Spinal Meningitis. Dr. C. E. Purcell; subject, Nasal Catarrh.

Jan. 8th—Dr. C. H. Brothers; subject, Primary Skin Lesions. Dr. H. A. Smith; subject, Anatomy of the Lung. Dr. L. E. Young; subject, Physiology of the Lungs.

Jan. 15th—Dr. C. H. Brothers; subject, Primary Skin Lesions. Dr. S. Z. Holland; subject, Pneumonia.

Jan. 22nd—Dr. C. H. Brothers, subject, Secondary Skin Lesions. Dr. F. V. Kimbrough; subject, Bronchitis.

Jan. 29th—Dr. J. T. Reddick; subject, Pleurisy and Complications. Dr. C. H. Brothers; subject, Secondary Skin Lesions.

Feb. 5th—Dr. J. G. Brooks; subject, Gonorrhoea. Dr. H. B. Sights; subject, Tuberculosis-Pulmonalis.

Feb. 12th—Dr. J. G. Brooks; subject, Chancroids. Dr. Frank Boyd; subject, Surgery of the Lungs.

Feb. 19th—Dr. H. M. Childress; subject, Retinitis. Dr. Delia Caldwell; subject, LaGrippe.

Feb. 26th—Paper; Dr. E. R. Earle; subject, Rickets.

The following gentlemen were elected members of the Society, viz:—Drs. J. B. Aeree, H. B. Winters, Paducah, Ky.; J. F. Dunn, Melber, Ky.

Hoping the outline given of the post-graduate work will prove of some interest to other societies in the State as it has been a source of practical and scientific benefit to ours.

The McCracken County Medical Society meets every Tuesday evening.

L. LYNE SMITH, Secretary.

The Maysville Academy of Medicine, an organization independent of the County Society, and composed of all of the physicians of the city, is in a most flourishing condition. The Society is divided into chairs, covering all the departments, and the exercises consist of didactic lectures or talks, discussions and clinics. The meetings are held every Thursday evening at City Hall and are well attended. All the physicians of Mason and adjoining counties are cordially invited to attend. A splendid feature of these academy exercises is that written lectures or talks are prohibited, and whenever a member finds it impossible to fill his engagement he is obliged to furnish a substitute.

Monroe—Monroe County Medical Society met at the office of Drs. Bushong and Duncan, Tompkinsville, January 17; Drs. Bushong, Duncan, England, Marrs, Hamilton, Palmore, Smith and Simpson present. The house was called to order by President O. P. Hamilton. Drs. Bushong and England reported a case of antepartum eclampsia at seventh month. Eclamptic convulsions ceased after emptying the bowels and bladder and giving veratrum, morphine and scopolamine. Dr. England reported case with headaches, and pain at elbows and shoulder joints, with no swelling, redness or tenderness; controlled only by large doses of opiates.

It was decided to have no meeting in February, and to change time of meeting from third Thursday to first Thursday in each month. For March meeting, "The Action of Arsenic on the Human Economy from a Therapeutic Standpoint" by J. F. Marrs. "Cerebral Congestion" O. P. Hamilton.

E. E. PALMORE, Secretary.

Powell—The Powell County Medical Society met in Stanton January 7th, at 10 o'clock a. m. and elected the following officers for the year 1907: A. T. Knox, President; J. E. Lemming, Vice-President; I. W. Johnson, Secretary and Treasurer; C. D. Mansfield, Delegate, and B. Littlepage, I. W. Johnson and C. C. Knox, Board of Censors.

J. E. Lemming addressed the Society on the

Sanitary Conditions of Jerusalem.

It was unanimously voted to adopt a minimum fee of five dollars for all life insurance examinations.

I. W. JOHNSON, Secretary.

Warren—The regular meeting of the Warren County Medical Society was held in the Physician's Club Room, Feb 13th. The president, W. C. Simmons, in the Chair. The meeting was well attended by the doctors from the surrounding districts, some coming many miles in order to be present, but many of the city doctors were absent.

L. H. South spoke on the Etiology and Pathology of Bone Tuberculosis and supplemented the address with a diagram of the different features of the subject which was a preliminary to A. T. McCormack's discourse on Tuberculosis of Bone, in which he spoke of the importance and ease of early diagnosis in this disease, and said that a diagnosis made after the deformity had begun was worse than none. The only treatment for tubercular joint disease is immobility of affected parts.

Fresh air, sunlight, and forced feeding are valuable adjuvants. Deformity should always be avoided and will be if treatment begins at the proper time. The family should realize that the long application of braces or plaster jackets is essential, and not only not cruel, but humane.

In discussion E. N. Hall said that the most important question in tuberculosis is early diagnosis; then the disease can be cured; physicians should study their cases more thoroughly, and ought to be better diagnosticians.

J. O. Carson said that for the past twenty years he had advocated before this society the theory that a person who has had tuberculosis of bone and comes through the disease in good shape, has acquired immunity to tuberculosis. He mentioned some twenty cases as examples. In 1900 he had had this theory approved by the Medical Department of one of the great insurance companies which had accepted a man who had gone through a case of Pott's disease in his youth. He believes that any specific prophylactic treatment for tuberculosis will be developed along this line.

J. H. Souther reported a case of tuberculosis of the elbow joint, which healed followed shortly by infection of the knee. It had suppurated and pain and muscular spasm could only be controlled by opiates. The use of Buck's extension followed by plaster of Paris bandage was recommended by A. T. McCormack for treatment.

W. C. Simmons, just returned from post-graduate work in Chicago, gave an interesting talk on the opsonic index. A specimen of blood is brought in contact with the bacteria and the percentage of leucocytes that take up the bacteria

is the opsonic index of the patient and represents his ability to contend with the disease; in other words, if the seed has a fertile soil in the proper season, it flourishes.

LILLIAN H. SOUTH, Secretary.

Woodford—The Woodford County Medical Society met in regular session on the 5th of February, Dr. Worthington, Vice President, in the chair. Present, Drs. Holt, Crawford, Risque, Parker, Dorsey, McCauley, Stedman, Blackburn and Crenshaw.

There being no business to be transacted, Dr. Dorsey proceeded to read his paper on Diphtheria.

The paper showed care and study and reflected much credit upon the writer. The Definition, History, Diagnostic Points, Prophylaxis, Prognosis and Treatment were all well elaborated. The Doctor then gave the history of three cases as follows:

Case I, male, 13, with adenoids and swollen tonsils covered with frosty white membrane, rapid and compressible pulse, rapid respiration, temperature 102 degrees, with no history of contagion. Six hours later the membrane had invaded the pharynx and uvula. 2000 units antitoxine given and throat swabbed with Loeffler's solution and strychnia given. In six hours more, great improvement, pulse 110, respiration 30. Swabbing continued and the throat sprayed with Peroxide Hydrogen. Made an uneventful recovery.

Case II, female, age 6, taken ill on the 8th. In the absence of the family physician, I was called, on the evening of the 11th. Great prostration, pulse rapid, feeble and compressible, temperature 102° respiration 30, great anaemia, buccal cavity almost entirely covered with a white frosty membrane. Diphtheria was recognized and 2000 units ordered at once. Throughout the night supportive measures were used. The morning of the 12th the regular attendant returned. The child grew rapidly worse, dying about noon with uncontrollable nasal hemorrhage.

Case III, male, 21 months, taken ill the 3d Oct., 1906, but not seen by me 'till the 6th. Cough croupy, not relieved by emetic, respiration 50-60, some cyanosis, pulse 180, feeble and of low tension, child very restless, being quiet only with arms about mother's neck with chest against her shoulder. Numerous râles in apices of both lungs, first sound of the heart inaudible, no membrane visible. 2000 units given at once and two hours later 4000 more. At intervals of six hours, two more tubes of 4000 each were given. Pulse now 200, respiration 80-90, cyanosis marked, exceedingly restless. Two more tubes of 4000 units each, at intervals of six

hours, making in all 18000 units. The last injection, by causing some worry, to all appearances killed the child. Heartbeat barely audible, simply a thrill, no pulse at the wrist. Strychnia gr. 1-100, and nitro-glycerine gr. 1-300. The child began to rally in three minutes, opening his eyes and looking brighter, after which he slept two hours when some nourishment was given. Eight hours later he began to vomit without effort a very black thin fetid fluid, by which I was led to believe that the disease had extended to the lungs, oesophagus and stomach. Infusion Digitalis and Potassium acetate was given as an eliminant and the patient watched for several days. Recovery uneventful without sequelae.

Let this case demonstrate the necessity of vigilance and heroism in cases of apparent inevitable deaths.

Dr. Crenshaw was much pleased with the paper, but was even more gratified that Dr. Dorsey had driven nine miles in the cold to read it. He took this as an evidence, he said, that the doctors of the county are waking up to the fact that they have other obligations than those between patient and attendant and that they owe something to their brother practitioners. He believed that the most of the doctors of the county are feeling the necessity of a thrifty county society and have determined conscientiously to shirk no obligation.

He thought no mistake was ever made in giving too much antitoxine or in giving it too early, nor did he think any harm was ever done, even if the subject proved not to have diphtheria. He thought that doctors erred in waiting and even then in giving it too sparingly. He instanced a case—child female, age 18 months, seen at 6 p. m., 4000 units were given at once, the child paying no attention to the prick of the needle. After the injection, respiration was found to be 80 pulse 140, temperature 103°. Mucous râles were found throughout both lungs. Four hours later, the conditions seemed to be worse and 4000 more were injected, the child in the meantime never attaining more than a few seconds of forced consciousness. Four hours later the condition seemed, if possible, worse and there was not the least reasonable hope but that the child would die. Nevertheless, 4000 more units were given and the attendant retired. When called at 6 a. m., the child was sleeping, countenance clear, respiration 40 and almost normal in character, pulse 100. Later the child took some nourishment. At 9 a. m. 2000 more units were given. The child was seen again in the afternoon and discharged cured. There was never any membrane in sight nor is there history of any having been coughed up. He detailed another case, boy 6, in which

intubation was done, but the tube was very quickly expelled and later a large piece of membrane. There was no deposit in sight.

Dr. Stedman said the injection of the antitoxine had several times been followed by a rash, this experience being confirmed by others present.

Dr. Parker said the only trouble in diagnosis was with Follicular Tonsillitis. He did not wait for a nice diagnosis, but gave the antitoxine when in the least doubt. He often used the antitoxine as a means of diagnosis. He said that the collapse often was out of proportion to the amount of membrane present, the poison of the toxins seeming to attack principally the heart.

Dr. Crawford wanted to thank Dr. Parker for leaving out a refined diagnosis; that it made no difference as to the result whether the case were one of so-called membranous croup or diphtheria. "Push the antitoxine, no matter how desperate seems the case. A man who will wait for prominent and unmistakable symptoms longer than 24 hours, ought to be enjoined from the practice of medicine."

Dr. Risque had seen a case near Russell Cave in which tracheotomy was done, but the membrane was crowded down in advance of the tube, very quickly producing suffocation.

Dr. Worthington had had the antitoxine followed by rash and also by severe pains in the legs. He believed in full doses of the antitoxine, but was inclined to think that the doctors were a little extravagant and reckless in its use. He had given in one case 24,000 units altogether, the boy very promptly dying, as he thought, from the antitoxine. The heart should be watched. He believed that diphtheria and membranous croup are two distinct diseases.

J. W. CRENSHAW, Secretary.

Mr. Editor.

We country doctors are glad to note the improvement in the Journal. Why not have the best Medical Journal in the United States? We have the material and, I think, can say the right men at the helm. The Monroe County Medical Society is still in the swim. We met last Thursday, notwithstanding the roads were in a terrible condition. We have a splendid set of new officers and will continue to do good work through this year. We have changed the time of our regular meeting to the first Thursday in each month. At the next meeting we will discuss "Cerebral Congestion and Therapeutics of Arsenic."

I have turned down two cheap insurance companies since I saw you. They are out of business in this county, I am glad to say.

JESSE T. SMITH, Delegate.

COUNCIL OF PHARMACY.

ALPHOZONE.

Alphozone, $(\text{COOH}.\text{CH}_2\text{CH}_2\text{CO})_2\text{O}_2 = \text{C}_8\text{H}_{10}\text{O}_8$, an organic peroxide resulting from the action of hydrogen dioxide on succinic anhydride.

Actions and Uses.—Alphozone belong to the class of organic peroxides, and by its powerful oxidizing power becomes a germicide and antiseptic. **Dosage.**—Alphozone is also marketed in the form of tablets containing, each 0.065 Gm. (one grain), of alphozone, which are used for making solutions, one tablet to 60 Cc. (2 fluid ounces) of water giving a solution of (1 to 1000) suitable for general external use; but, as a nasal douche, one tablet in 180 Cc. (6 fluid ounces) of water is often preferred. Manufactured by F. Stearns & Co., Detroit, Mich.

ALUMNOL.

The aluminum salt of B-naphtholdisulphonic acid, $\text{Al}_2(\text{C}_{10}\text{H}_7\text{OH}.\text{(SO}_3)_2)_3 = \text{Al}_2\text{C}_{30}\text{H}_{18}\text{O}_{21}\text{S}_6$.

Actions and Uses.—It is an astringent and mild antiseptic. It is claimed that it can be used as a mild astringent, an irritant or a caustic, according to the strength of the solution, and it is asserted that it exerts a peculiarly destructive action on gonococci. It has been recommended for a variety of affections in which a caustic, astringent or antiseptic is indicated. It has been particularly recommended for gonorrhoea in females, especially when affecting the endometrium. **Dosage.**—As a surgical antiseptic, in 0.5 to 3 per cent. solutions; in gynecology in 2 to 5 per cent. solutions; in otology and laryngology, either as powder or in $\frac{1}{4}$ to 1 per cent. solution as douches, washes or gargles; as cautery, in 10 to 20 per cent. solution. Manufactured by Farbwerke, vorm. Meister, Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

AMINOFORM.

A name applied to Hexamethylenamina, U. S. P. Sold by C. Bischoff & Co., New York.

ANESTHESIN.

Anesthesin, $\text{C}_6\text{H}_4(\text{NH}_2)(\text{COOC}_2\text{H}_5)_2$ 1:4 = $\text{C}_9\text{H}_{11}\text{O}_2\text{N}$ the ethyl ester of paramido-benzoic acid, obtained by the reduction of paranitrobenzoic acid.

Actions and Uses.—It was introduced as a substitute for cocaine and is a local anesthetic, similar in its action to orthoform and said to be equally effective, but free from irritant action and toxicity. The anesthetic action, like that of the related compound orthoform, re-

sembles that of cocaine, but is purely local, does not penetrate the mucous membranes, and in consequence of its insolubility the compound cannot be used by hypodermic injections. In consequence of its insolubility the anesthetic effect is more prolonged than that of of gastralgia, in ulcer and cancer of the stomach for the relief of pain, and is applied locally in rhinologic and laryngeal affections, urethritis, etc.; it is also recommended for anesthetizing wounded surfaces, burns, ulcerations and painful affections of the skin. It is more effective in cases where the skin is broken. Dosage.—Internally, 0.3 to 0.5 Gm. (5 to 8 grains), in pastilles. Externally it is applied as a dusting powder, either pure or diluted. It may be applied as an ointment or in the form of suppositories. Manufactured by Farbwerke, vorm. Meister, Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

ANTIPYRINE SALICYLATE.

Antipyrine salicylate, $C_{11}H_{12}N_2O.C_6H_4OH.CO_2H=C_{18}H_{18}N_2O_4$, a weak chemical combination of antipyrine and salicylic acid.

Actions and Uses.—This compound possesses the properties both of antipyrine and salicylic acid and combines the analgesic power of one with the anti-rheumatic action of the other. It has been used with good results in sciatica, rheumatic fevers, chronic rheumatism, influenza, pleurisy, dysmenorrhoea, etc. Dosage.—0.3 to 2.0 Gm. 5 to 30 grains) in cachets or capsules.

ANTITHERMOLINE.

A name applied to a preparation said to be made according to the following formulae: Each pound contains 4000 grains of imported washed kaolin, washed and purified, 14 grains boric acid, 14 grains of oil of eucalyptus, menthol and thymol combined, and 4.9 fluid ounces of glycerin. It closely resembles the Cataplasma Kaolini, U. S. P. Prepared by G. W. Carrick Co., New York.

ANTITHYROID PREPARATIONS.

Preparations obtained from the blood or milk of animals, after the removal of the thyroid glands. The use of these preparations is based on the theory that the thyroid gland secretes products which are toxic, but which neutralize, and are neutralized by, other toxic substances produced elsewhere in the body. Removal of the thyroid glands, therefore, leads to the accumulation of these second toxic substances as evidenced by the phenomena of cachexia strumipriva and myxedema. On the other hand, the blood or milk of such animals is capable of preventing the effects of a hypersecretion of thyroid sub-

stance, such as is supposed to occur in Basedow's disease (exophthalmic goiter). These views are still largely hypothetical; but the majority of clinical observers report markedly beneficial results in the milder forms of the disease and in obscure nervous disorders which are supposedly connected with thyroid hypersecretion. The effects are less pronounced in the more severe forms. The action is merely palliative and other measures of treatment should not be neglected. Improvement occurs in two or three weeks and is indicated by an amelioration of the nervous symptoms, tremors, palpitation, insomnia and excitability. The administration must be long continued. Oral and hypodermic administration are equally effective, but the former is usually preferred. These preparations are not toxic, even when very large doses are used.

ANTIHYDROIDIN, MAEBIS.

The blood-serum of sheep from which the thyroid gland has been removed at least six weeks before the blood is drawn, preserved by the addition of 0.5 per cent. of phenol.

Actions and Uses.—For actions and uses see Antithyroid Preparations. Dosage.—It is administered by the mouth in doses beginning with 0.5 to 1 Cc. (8 to 15 min.) three times a day, gradually increasing the dose as necessary. Manufactured by E. Merck, Darmstadt. (Merck & Co., New York).

ARGENTAMIN.

An aqueous solution of silver nitrate and ethylenediamine, corresponding to 10 per cent. of silver nitrate.

Actions and Uses.—It is antiseptic and astringent like other silver salts, with the asserted advantage of being non-irritant and more penetrating than silver nitrate. It is said to be useful in all cases where the non-caustic action of silver nitrate is indicated. Dosage.—It may be used in the anterior urethra in 0.25 to 1 per cent. solution; in the posterior urethra in from 1 to 4 per cent. solution; in ophthalmology in 5 per cent. solution. Manufactured by Chemische Fabrik auf Actien, vorm. E. Schering, Berlin. (Schering & Glatz, New York).

ARGONIN.

A soluble casein compound containing 4.28 per cent. of silver.

Actions and Uses.—Its action and uses are similar to those of silver nitrate, but it is claimed to have greater power of permeating living colloid membranes than other silver albumoses. It is applied as an injection in 0.1 to 0.2 per cent. solution; in ophthalmic practice a 10 to 20 per cent. solution in glycerin

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VOL. V, No. 3.

APRIL, 1907.

\$2.00 YEARLY.

AN EVIDENT DUTY.

We have no apology to make for reprinting from a recent number of the Journal of the American Medical Association an excellent but *terrible* article by Mr. Bok, the distinguished editor of the Ladies' Home Journal. Excepting Collier's Weekly only, Mr. Bok's magazine has done more to inform the public about the real evils of patent medicines and self-medication than any other agency. Read every word of Mr. Bok's article and you will realize how much more each of us can do to help in the work. Look over your own prescription files for a week and see if you have prescribed any "ready made" nostrum or compound of whose contents, and consequently of whose action, you are ignorant. What is in antikamnia, aletris cordial, gadine cordial, somnos, the fake digestive elixirs, and the rest? *If you do not know, stop prescribing them.*

Look over the files of the medical journals coming to you and if they contain advertisements for neurosine, dioviburnia, chalongia, California fig syrup, tongaline, seng, cactina or chionia, labordine, glycozone, phenalgin, thialion, sal hepatica, and such preparations write *to-day* to their editors to stop sending them to you, especially if you are getting them free. There may be some merit in some of these things, but you may be sure if there were much they would have been the first to submit them to the Council on Pharmacy. Mr. Bok says the medical journals are the greatest aids to the nostrum interests. Have your society at its next meeting pass resolutions calling on every journal coming to your county *by name* to clean up or quit. It is a disgrace to us if we do not act, and Kentucky physicians, at any rate, do not have to have their

attention called twice to any evil which it is in their power to remedy.

Resolve to-day, right now, that you will prescribe no mixture, compound or nostrum unless you know from a disinterested source its exact composition, and the physiological action of each one of its ingredients. Or better still, prescribe no proprietary medicine of any kind unless it has been approved by the Council of Pharmacy and Chemistry of the American Medical Association. If they are worthy of being prescribed, and are offered on their merits, rest assured they will be approved by the Council. If you want to know what medicines have been approved, see our advertising pages in this issue, or write to the American Medical Association, 103 Dearborn avenue, Chicago. It is better to trust alone to nature and to pray to nature's God, than to burden your patient's system with medicaments you know nothing about. Then when you have put your own house in order, resolve, to-day too, that you will permit no medical journals to come to your address which advertise preparations no self-respecting doctor can prescribe.

We have all been sinning together. Let us Kentuckians, at any rate, get together and quit right now!

We have no war to make on the so-called independent medical journal so long as their advertising columns are clean. The debt of gratitude the profession owes the privately owned medical press would be illy-repaid by indiscriminate condemnation. The House of Delegates at Boston unanimously declared the policy of the American Medical Association on this subject. But we do respectfully submit that any medical journal, in view of the knowledge on this subject to be ob-

tained *gratis* from the Council on Pharmacy, which continues much longer to fill its advertising pages with nostrum advertisements should be tabooed by the profession. Such journals do not deserve the name of "independent" and it is a reflection on the decent privately owned journals to so denominate them. Their action would indicate that *they are dependent on the nostrum makers to support them.* We must save all that is good in independent journalism — and that is a great deal—but, to do this, it is not necessary to continue much longer to admit to our offices the low-grade journals that are so evidently under the control of proprietary medicine interests whose money supports them.

MEDICAL JOURNALS AND NOSTRUM ADVERTISEMENTS.

The following resolutions were unanimously adopted by the House of Delegates of the American Medical Association at Boston:

Resolved, That the American Medical Association heartily endorses and approves of the policy of accepting for publication all advertising matter coming within the provisions established by the Council on Pharmacy and Chemistry of this Association, believing that it is wise and desirable thus to present for the scrutiny of the physicians such articles as are honestly made and are ethically marketed.

Resolved, That the committees on publication of the journals of medicine published by the State medical associations affiliated with this body be asked to assist the Board of Trustees in their effort to suppress the advertisement of medical nostrums and to co-operate in the work of securing pure-food and pure-drug laws in the United States.

Whereas, It has been noised abroad by the enemies of a united medical profession that this Association and the State medical associations are attempting or will attempt to destroy all medical journals not owned or controlled by them; and

Whereas, Much of the advance in medical science in the last fifty years has been due to the efforts and labors of medical journals owned and edited by physicians and others, and this Association and its work would have been greatly hindered and delayed had it not been for the moral support of these journals, now, therefore, be it

Resolved, That the American Medical Association heartily endorses, and requests its members to support, all such medical journals, no matter by whom owned, as are en-

gaged in promoting the interests of scientific medicine and which refuse to accept financial aid or advertisements from venders of nostrums, or others inimical to the true interests of the profession.

ABORTIONISTS AND DRUNKARDS.

In its first trial of a physician charged with the commission of a criminal abortion the State Board of Health of Kentucky has held that a criminal abortion is producing the expulsion, and consequent destruction, of the fetus from the womb of the mother at any stage of conception, when it is not necessary to save the life of the mother.

After trial the right of one physician to practice in the Commonwealth has been suspended for two years. In this case the State Board felt that the defendant's action was largely due to ignorance and that he had been misled by an older and sharper character who had been forced out of this State, and it felt that two years study and consideration would prepare him for re-entering upon an honorable career.

A notorious woman abortionist in Louisville agreed to a plea of guilty to the charge of grossly unprofessional and immoral conduct and the consequent revocation of her license.

Other cases are pending and there are still others coming. The profession of Kentucky esteems itself too highly to longer permit habitual drunkards and drug habitués to mistreat the helpless and ignorant sick, or to let the nefarious criminal or contemptible creature who adds to his decent income his ill-gotten hire as the murderer of unborn innocence, much longer ply their peculiarly pusillanimous trade. Every honest doctor and every honest citizen must help. "We want a league, offensive and defensive, with every well-wisher of Kentucky and her people," is our State Board's motto.

ATLANTIC CITY.

We take this method of notifying those interested in the meeting of the American Medical Association at Atlantic City beginning June 4th, that the round trip rate will be one fare plus one dollar. To find what it will cost from your town ask your ticket agent for the *new rate* one way to Atlantic City. Add a dollar to this and you have the rate. Sleeper tickets will cost about four dollars per berth (each berth will carry two persons) each way. Hotel arrangements will be completed in Atlantic City on three plans. We will arrange for one hotel at which the

rate will be \$1.00 a day, European plan, and two others at \$2.00 and \$5.00 a day, American plan. The first will appeal to those members taking lunch baskets or who prefer eating at restaurants. The meeting will last four days.

Members who desire to attend what will prove to be the greatest medical meeting ever held can do so at an expense not to exceed \$35 to \$40. Of course this modest sum will be exceeded by many. A side trip by boat to the Jamestown Exposition will be arranged for the return trip at a minimum extra cost. As nearly every Kentuckian has Virginians amongst his ancestry many will want to take advantage of this opportunity.

The advantages of this trip to the active, busy practitioner are so numerous that our limits forbid their discussion. The clearing of the brain by the rest and diversion, the coming in contact with the better element of the profession, the familiarity with the aims and objects of the parent organization, of which our county societies are the warp and woof, the trip through Ohio and Pennsylvania, the fresh salt air of the great ocean, these, even if there were not the splendid gatherings in the different section meeting places where the newest and all that is best of the old in our profession will be presented by the masters of the art. Let us go, we Kentuckians, to the American Medical Association and show by our numbers and our bearing there, the real worth of our splendid county societies.

OUR NEXT SESSION.

This association will hold its next annual session in Louisville early in October. It is with pardonable pride that President Griffith announces that our national leader, George H. Simmons, the Secretary of the American Medical Association and Editor of its great Journal, has accepted the invitation of our House of Delegates to deliver an address during the session on "What the American Medical Association Stands For." We hereby assure Dr. Simmons of the heartiest welcome that representative Kentucky doctors from every county in the State can give. The Mountains, the Purchase, the "Pennyryle," and the Bluegrass and the Beargrass will all be present to get the stimulus of his presence and to support him in his great work for our profession.

SCIENTIFIC EDITORIALS.

THE SKILLFUL USE OF DIGITALIS.

By T. C. HOLLOWAY, M. D., LEXINGTON.

Few of us who are engaged in the practice of medicine, realize as we should the enormous responsibility and the sacred obligations which we are called upon to assume in the discharge of even the most trivial duties and with almost every act of a professional nature. Indeed there are few relations in life which impose greater responsibility and in which more is required, than in the relation properly existing between the true physician and his patient. In the midst of the numerous and varied demands which are made upon the busy practitioner, the choice of a therapeutic agent and the writing of a prescription, too often become mere matters of routine or habit—and he drifts unconsciously upon the shoals of empiricism; or perhaps what is infinitely worse he yields to the pernicious tendency of the time and chooses at random one from the endless and ever increasing list of "ethical" nostrums which are so cunningly thrust upon him by avaricious manufacturers,—a practice which can not be too severely condemned.

Rational therapeutics which should be the only basis upon which we venture to assume these momentous responsibilities implies a great deal. In the first place, such general knowledge of pathological processes and of the agencies at our command, with which to meet them, as will enable us to appreciate therapeutic indications. In the second place, a special knowledge based upon careful and thorough examination of each individual case, of the special pathological process presented and of any complications that may exist; and a special knowledge of the particular drug to be used and of its probable physiological action under the given conditions: And then in addition to knowledge, the patient has a moral and a legal right to expect and demand of his medical adviser a reasonable amount of skill in the employment of just that particular therapeutic agent which may be chosen for the relief of just that particular condition which he presents. The surgeon may have before him a case of undoubted inguinal hernia and his assistant may prepare for him every instrument, suture, and dressing needed in the operation to be done for its relief—but if he lacks skill in the use of his instruments, or in the placing of his sutures, or in the application of the dressings, the patient is likely to fare badly under his treatment. Is it too

much to demand of the internist that he should seek to acquire something of the same skill in the use of drugs which the surgeon possesses in the use of his instruments? And may it not truly be said that herein lies the secret of all real success? The great fountains of knowledge are open to all of us; the chemistry, the pharmacology, the physiological action, the therapeutic indications are all worked out for us very fully for most drugs, and are matters of text-book information. But the physician who has added to this knowledge of drugs a certain skill in their use, is the one to whom we must turn for help in times of distress, and the laity are not slow to recognize this attainment.

Skill in the use of a drug can only be acquired as the result of such patient, thorough, and careful study and observation as will secure familiarity not only with the general truths in regard to it, but with the niceties of dosage, methods of administration, indications and contraindications.

With these points in mind it may prove not wholly unprofitable to review, though it must be very briefly, our present knowledge of digitalis.

Although the medicinal properties of digitalis have been recognized and used for more than three centuries, it is as yet but imperfectly understood. Though one of our most useful, and at times almost indispensable therapeutic agents, it is still one that is most greatly abused. Though the list of its pharmaceutical preparations that have been at one time or another employed and recommended is a very long one indeed, but four of them gain recognition in the eighth revision of the United States Pharmacopæia. Though its use is most helpful in a great many conditions which are quite common—the contraindications to its use are scarcely less numerous and important.

The literature, which is voluminous, abounds in contradictions, and no little confusion and controversy still exist as to various preparations, their physiological action and therapeutic usefulness. These considerations should not be discouraging—but rather serve as an incentive to more diligent study and observation as well as greater care in prescribing.

Recognizing the important place which this drug occupies in our armamentarium, it should interest each one of us to know just when to employ it and why; what form to prescribe, just when to discard it, and if these observations shall serve to emphasize the need for individual investigation along these lines, our purpose will have been accomplished.

Digitalis Purpurea—purple fox-glove, indigenous to Great Britain, Ireland, parts of Europe, and grown to limited extent in America, is the official plant, which is the source of a long list of medicinal preparations. Only the leaves are used. These should be gathered in June or July from plants of the second year's growth, dried in the dark, in baskets with moderate heat, and must be carefully packed in order to prevent deterioration. Adulteration is not uncommon. These difficulties in the way of securing uniformity in the quality of the crude drug may account for much of the existing confusion as to its effects. The following preparations are official—U. S. P. 8th Revision.

Solid extract, dose $\frac{1}{2}$ to 3 grains;

Fluid extract, dose 1 to 2 minims;

Tincture dose, 3 to 30 minims. Strength slightly increased in the 8th revision—from 6 2-3 to 10 gm. per 100 c. c.)

Infusion, dose 2 to 8 fluid drachms. In addition may be mentioned the powdered leaves, dose 1-2 to 3 grains, Digitalin Av., dose 1-100 grain. The latter is a preparation suitable for hypodermic injection, supplied by several of our leading pharmaceutical houses, and supposed to represent the active principles of the drug. It is not an alkaloid, as *Digitalis* contains no alkaloids.

Separation of the proximate principles of *Digitalis* which consist of four or more glucosides, seems to present great difficulty and has been the occasion of much investigation and discussion. Up to the present time little of practical value has been accomplished in this direction. The value of the drug consists in the combined action of the several of these principals rather than in any one of them.

For an admirable discussion of the pharmacology of *Digitalis* the reader is referred to a recent paper of Professor Robert A. Hatcher of Cornell, in which present views as to the physiological action of digitalis and of its various principles, are succinctly stated.

The principal effects which follow the exhibition of *Digitalis* as here shown consist of slowing and strengthening of the heart's action, diastole being lengthened and systole becoming stronger, together with some vasoconstriction, the result being a general rise, of blood pressure. In addition to its effect upon the circulatory system, it is observed that in certain heart lesions, associated with dropsy it produces a marked diuretic effect.

The following references to the use of digitalis may serve to illustrate and to emphasize the necessity for the exercise of careful,

discriminating judgement in the employment of this as well as other potent remedies.

Disease of the Heart. The principal sphere of usefulness of digitalis is valvular lesions of the heart. Here it is the remedy par excellence, and the indications for its employment are clear, but it is of the utmost importance that its use should be well timed. When the mitral or tricuspid valves are involved, and there exist venous engorgement, cedema of the lungs and subcutaneous tissues, and interference with liver and kidney functions the effects of its administration are most happy. Loomis thus refers to its use in *mitral diseases*:

"In every case of mitral disease there comes a period when the pulmonary hyperaemia shows that the compensation of the right heart has failed. An adjustment of the heart to the circulation is now effected by the judicious administration of digitalis. Digitalis should only be given at those times when the heart-failure is imminent and there is marked pulmonary congestion. Half an ounce of the infusion every two hours for twenty-four or forty-eight hours is often required to overcome the heart failure. The time will come when digitalis ceases to have its sustaining effect upon the heart-muscle; hence it should be most sparingly and carefully used, and the patient should never be allowed to use it continually.

When the pulse is rapid, feeble, and irregular, more time is needed for the flow of the blood into the ventricle, and greater force and regularity in the ejection of the blood from that ventricle are demanded. Digitalis fulfills all these conditions: the pulse becomes regular, beating about sixty per minute, full and forceful. The urine, before scanty, now becomes abundant and normal. Pulmonary engorgement diminishes, and commencing dropsy gradually, but totally disappears.

Hayden advises ten minims of the spirits of chloroform and fifteen minims each of the tincture of digitalis and the tincture of the perchloride of iron in an ounce of water every three hours.

Whenever asystolism is present or suppression of urine is threatened, digitalis should be given whether the other indications are present or not. In most cases of mitral stenosis it is best to avoid the use of digitalis as far as possible."

In the same connection this author thus states his views as to the employment of digitalis in the treatment of cardiac insufficiency: "Medicinal agents are not to be resorted to until the cardiac hypertrophy fails to be compensatory. Digitalis is given to produce a sedative action, and therefore

should be given in very small doses, and regulated according to its effect on each patient. An infusion of the English leaves is the preparation which is most reliable although the tincture, if fresh and well prepared, is equally good. When rapid and immediate action is demanded digitalis may be given hypodermically. There is one guide to its use not unimportant to remember; that is as long as it causes an increase in the flow of urine it is safe to continue it.

Osler says that digitalis is the most powerful remedy we possess in restoring and maintaining compensation. Under its use the irregular feeble and frequent contraction becomes regular and stronger and the embarrassed circulation is relieved.

In *Myocarditis* the question as to the wisdom of using digitalis is one upon which authorities differ. Osler considers the reasons for and against its administration and concludes that "after all the question amounts to giving of digitalis in dilatation, and with a weak first sound and feeble action the *careful* administration in conjunction with stimulants, will be found beneficial."

It is worthy of remark that in all of those conditions where this drug is used with such signal benefit our best teachers find it necessary continually to modify their recommendations with the caution that it is to be *carefully* used.

In the treatment of acute pericarditis Dr. Costa calls attention to the importance of ascertaining the stage of the disease "whether seen in the stage with plastic exudation; whether this exudation markedly persist and but little liquid effusion takes place; or whether the effusion is copious." He teaches that in the earlier stages, digitalis is an admirable remedy. Its use in small frequently-repeated doses renders the action of the heart more regular and reduces its frequency. Both Friedreich and Bauer advise large doses, which are to be suspended when the pulse becomes slow or irregular. Where there is marked effusion, notwithstanding the seeming indication for digitalis on account of its tonic effect on the heart, and its diuretic powers Da Costa says that his clinical experience is against its use. In *angina pectoris* that dread malady which strikes so suddenly that often no treatment for its relief can be instituted before a fatal termination, Austin Flint found the administration of digitalis, *under the proper restrictions* to prove highly useful in preventing the reoccurrence of the paroxysms.

In exophthalmic goiter digitalis meets perfectly the most important requirements in

controlling the accelerated action of the heart, and all writers agree in recommending its use. It is observed, however, that its liability to disturb the stomach in this as in many other conditions may prove a serious difficulty, and the drug may have to be discontinued on this account when it otherwise would serve a most useful purpose.

In degeneration of the heart muscle, with hypertrophy and failing compensation, digitalis is frequently helpful, but an important contraindication should be noted in senile and atheromatous cases. Here, as observed by Sir William Jenner, the fatty degeneration of the heart may be a preservative lesion and the use of digitalis might induce a cardiac strength out of proportion to arterial resistance.

In discussing the treatment of croupous pneumonia Loomis condemns the practice of employing digitalis to counteract heart insufficiency, finding that it more frequently does harm than good. He says that the nervous element of the heart failure contraindicated its use.

In addition to the important diuretic effect already referred to as one of the benefits derived from the appropriate use of digitalis in diseases of the heart, it is worthy of note that this property of the drug gives it a distinct place in the treatment of that form of nephritis which so frequently occurs as a complication or sequel of scarlet fever. Here the combination of a diuretic, which does not stimulate the kidney and a heart stimulant that the associated cardiac weakness often demands, is most happy. Digitalis has been warmly advocated and quite as enthusiastically condemned in the treatment of many and varied conditions. Notably among them: aneurism, atheroma, dropsy, hydrocephalus, nervous diseases, particularly mania, for which it is stated that for nearly a century this remedy has been considered in Germany almost a specific. It has been used with more or less success in the treatment of some forms of kidney disease, in urinary calculi, asthma, phthisis, pneumonia, pleurisy, alcoholism and as an anaphrodisiac.

Among the older writers it is interesting to find that digitalis was extensively used as an

antipyretic, often with most disastrous results, but we must temper our criticism with sympathy when we think of the more recent fatalities which have been and are attendant upon the reckless and indiscriminate use of our modern coal-tar products for the same purpose.

From this cursory review, which is intended to be suggestive rather than in any sense exhaustive, it seems fair to draw the following conclusions.

1. The patient has a moral and legal right to demand of his medical adviser, not only knowledge of diseases and of the remedy he prescribes but skill in adapting the remedy to his particular needs.

2. Skill in the use of drugs can be acquired only when accurate knowledge of both the disease and the remedy is supplemented by patient study and careful observation.

3. Such study and observation become impossible and valueless when other than standard preparations of known compositions are employed.

4. The skillful use of digitalis, in particular, and of all potent drugs in general, depends upon the exercise of careful discriminating judgment, in every case, with due regard to indications and contraindications. Not only general rules, but the exceptions must be mastered.

5. If this be true of standard drugs, which have been under investigation for centuries, the temerity of him who assumes the responsibility of prescribing for a fellow human being a preparation of unknown composition, and without reliable and trustworthy authority, is not only foolish but criminal.

References.

1. Practical Therapeutics—Foster—1899—page 340.
2. Jour. Amer. Med. Assn. Vol. 47.—No. 25.
3. System of Med. Pepper. Vol. 3, pge 685.
4. Ibid Vol. 3, page 684.
5. Ibid Vol. 3, page 635.

6. Practice of Med., Osler—pge 660.
7. Ibid Vol. 3, page 784.
8. Die Krankhuten des Harzen.
9. "Diseases of the Pericardium," Ziemsen's Cyclop!
10. Pepper, Vol. 3, page 761.
11. Ibid, page 349.
12. Stockwell,—Sajour Cyclop. Vol. 2.

SOME REMARKS ON TREATMENT OF ACUTE GONORRHEA. ✓

By E. L. HEFLIN, LOUISVILLE.

There is a common saying among the laity that gonorrhea is no worse than a bad cold. This view is more or less prevalent among a certain class. There are many others who think that gonorrhea is a very easily managed disease; one that can be cured very readily by the neighboring druggist or some young man of personal experience that is always to be found about every town. I believe that few, comparatively speaking, appreciate fully the gravity and importance of the thorough treatment of this most frequent of all venereal diseases. Dr. Keyes refers to gonorrhea as "A malady scoffed at by the light-brained, hot-blooded younger members of the community," but when we think of the influence upon both sexes—"It rises in dignity from its putrid source and becomes an object worthy of serious study for every conscientious surgeon and physician." We are appalled when we think of the great damage that this disease is doing. Gynecologists tell us that at least sixty per cent. of the operations performed upon the uterus and adnexae are due to this disease. A committee from the American Ophthalmological Society states that our Blind Institutions in the United States are filled with children whose pitiful condition is due to this disease. J. M. Ray, after making a careful examination of the children in the Louisville Blind Asylum says that one-third of these children are blind as the result of preventable eye diseases. Quite a number of cases of impotency are due to this cause. Besides these remote affections we have diseases of the kidneys, testicles, epididymis, prostate glands, the joints, etc. It has been stated that eighty per cent. of the male population are infected at one time or another with this germ. This may seem rather high, but I do not believe that this estimation is too high for the cities. The disease is not so prevalent in the smaller towns and rural districts. The question is, how are we going to prevent

this disease and what is the best method of treating these cases?

Gonorrhea has existed since our earliest record of the human race and will continue until the last syllable of recorded time. As long as the sexual desires remain, so long will this disease be prevalent. However it is possible to greatly lessen its frequency and prevent many of its baneful effects. This is an old subject. Many views have been advanced from time to time as to the best way to achieve this end. It is not necessary to discuss the various views at this time. An excellent paper by Dr. Stites appeared in the last issue of this journal. Many laws have been enacted, all of which have been failures. It is not a question for legislation. To my mind, there is only two ways to solve the problem: by education and by better and more careful treatment of the disease.

Just how the public is to be educated is difficult to outline. It has been suggested that this education be carried out by the daily press, by pamphlets, by lectures, by the pulpit, by the family physician.

I believe that the first and most important point lies with the physician. How many physicians appreciate the gravity of this disease? That a great many do not is evident by the carelessness in which they treat the affection. They do not impress upon the patient's mind the dangers that may follow, what appears to him a very simple and innocuous disease, or by their lack of attention in the treatment of the disease, the patient feels that the trouble is a very simple one.

The treatment of gonorrhoea is a very important subject, like other affections, each case is to a certain extent, a law unto itself. Of course in each case careful and complete instructions should be given in regard to cleanliness, the dangers of infecting the eyes, the diet, the injurious effect of exercise as driving, skating, horse-back riding, bicycling, athletics, etc.; the use of alcohol and tobacco, sexual excitement. Unless these instructions are observed the case will be more difficult, if not impossible to cure. Many cases of acute gonorrhoea become chronic because of the failure to observe these general rules.

Acute gonorrhoea is treated by internal administrations or by local applications or by both. The most important is the local treatment; the other should only be considered as an adjuvant, not as a method of cure. Relying entirely upon internal administration does harm in that it often allows the disease to pass from an acute case to a chronic one. This method of treatment seems to me very unscientific. We have an infected

sinus or fistula, the object is to destroy the germs and aid nature to repair the damage. Medicines administered by the mouth, absorbed by the blood, eliminated by the kidneys, in a greater or less quantity of urine and coming in contact only momentarily with the inflated tissues cannot be very destructive to the gonococcus. Combined with local treatment, internal administration, is excellent and should be resorted to in every case, but not to be relied upon in any. The alkaline diuretics, potas. acetate or citrate (10 to 15 gr. t. i. d.), sod. bicarb. (20 gr.) will be found useful. These may be given alone or combined with the urinary antiseptics, the best of which is Hexamethylin tetramine (5-7 1-2 gr.), salol, boric acid. Later the stimulating diuretics (Ol. Sntali, Copai-bae, cubebs, etc.) are beneficial.

By far the most important treatment is by local means, either irrigation or injection or the combination of the two. The treatment by irrigation was revived by the celebrated French specialist, Dr. Janet, and is now known as the "Janet Method." It is *deservedly* popular. It has yielded quicker and better results in my hands than any other treatment. To physicians who are not in the habit of giving irrigations, it may seem to consume too much time and cause too much trouble. But if everything is handy the treatment can be administered in a very few minutes. Dr. Valentine of New York has done much toward advancing the popularity of this method of treatment.

Taylor recommends that these treatments should no be begun until the inflammatory stage has partially subsided. This has not been my experience. The treatment usually should be commenced at once and if carefully given will not only not be painful, but will often give early and marked relief. Of all the many drugs recommended potassium permanganate seems to be the best and the one most frequently used. Nitrate of silver or one of its salts will be found to be especially useful in the subacute or chronic stage.

The treatment of gonorrhoea by injection is one of the most popular methods of the general practitioner. It is easy, simple, and often efficient. The drugs advised are legion and it is necessary to enumerate them. Attention should be given to the selection of the syringe, the method of administering and the strength of the injection, making stronger or weaker, depending upon the results obtained. Harm is frequently done by strong injections, such are known as "Three Days Cure," or other "Sure Cure," remedies pre-

scribed by druggists who know nothing about the disease they attempt to cure.

A point that I wish to especially emphasize is that whether the case be treated by irrigations, injections, internal administration, or along other lines, the treatment should be continued until the patient is well—not until the discharge ceases, but, until the urine is free from shreds and the microscope fails to reveal the presence of the diplococcus or Neisser. Sometimes it seems that the main object is to stop the discharge and when this symptom is controlled the patient is pronounced well or feels that he is well and returns to his former mode of life. The symptoms recur and soon we have a more difficult case to cure,—that of chronic gonorrhoea.

RATIONAL GYNECOLOGY.

BY FRED L. KOENTZ, M. D.

Much ink has been wasted on the subject of "medical gynecology." There seems to be a distinct class of practitioners who are opposed to operative procedures and who maintain that the result desired may be accomplished, in many instances, by medical means. I will grant there is truth in the proposition if the limitations are sufficiently understood.

So much discussion on a mooted question naturally suggests the further question: Is there a medical gynecology? Why should partisans contend for a "medical" any more than for a "surgical" gynecology? Let us stop all of this "slush" upon the subject and understand that gynecology is the same the world over; if it were not, it would not be gynecology. If we would modify the term at all let us prefix the term "rational" and understand that it may mean the use of the stethoscope and sphygmomanometer quite as much as the speculum and tampon.

Gynecology, as practiced to-day, is neglected by the surgeons and confined within too narrow limits by the general practitioner. The impetuosity of the American surgeon rushes him into error many times while the practitioner. Too long has the term "gynec conservatism." The idea that the field of gynecology is confined to the "canal zone" is a palpable error. That the field is a broad one and embraces the whole range of medicine and surgery is equally true. No field calls more loudly for the "specialist" than this, and let me state right here that the specialist in gynecology must be both surgeon and practitioner. Too long has the term "gynecological specialist" been synonymous with "surgeon." The operator will operate because he sees through surgical glasses and the

practitioner will fail to operate for a similar reason. I contend that neither position is right or rational. The rational gynecologist, in a given case, runs his eye over the whole gamut of maladies, both constitutional and local, in search of three great combinations of causes, predisposing, exciting and accentuating or complicating. The sum-total of his experience in the fields of medicine and surgery will teach him where the case belongs. You will find him repairing a laceration in one, using massage and mechanics on a second and treating constitutionally the dyscrasia of a third and all for a distinct gynecological condition.

While the preponderance of evidence is on the side of surgery, it is equally true that there is another and not negligible side and that many cases presenting gynecological manifestations might be relieved by careful attention to a lithemia, a cholaemia, rheumatism, gout, malarial cachexia or even a diabetes.

How many men "doing" gynecology would go so far as to search for a portal obstruction in explanation of a pelvic congestion? And yet how often is an attack of "ovaritis" or "ovarian neuralgia," (familiar terms to the laity) nothing more than the local manifestation of a systemic circulation strangely out of balance; whereby there is a backing up all along the line until it affects a sensitive organ like the ovary or uterus, insinuating its painful presence upon our consciousness. Immediately our attention is fixed upon the painful spot and we pounce upon this delicate indicator and tear it out and put it in alcohol and show it to our county society. When will we learn to read this ovarian barometer and see in its tracings a general vaso-motor degeneracy? Which, let me ask, is the more rational; turn our attention to the blood pressure and relieve the congestion through the vaso-motors, relieve the lock up along the line by attending to some obstruction, or to cut out the ovary so that it can not get congested and hurt and "tell tales out of school" on the state of the circulation? Neglect these circulatory irregularities and allow these congestions of the ovary to go on and on and become cystic if they want to. What is a cystic ovary but the expression of an abnormally high tension ovarian pulse long continued and unrelieved?

Why is it that, when a menstruating woman exposes herself and begins to complain of stoppage of the flow and ovarian pain, that we focus our gaze upon this field through a 1-20 aperture and fail to see a tonsillitis or a rhinitis or other manifestation of vaso-motor

disturbance; all evidences of one and the same condition? Is it a chemotactic attraction of attention or is it our lack of appreciation of the wonderful sympathy between local manifestation and general cause? Undoubtedly some gynecological cases were best relegated to the field of internal medicine.

It is not my wish or intention to give the pendulum a radical push toward the medical side of the case or to tilt the clock either way in order to influence the longer or shorter stroke. Just let the case set level, keep your eye on the dial and rub the head if you honestly think that the rational thing to do.

Now a few words as to local treatment, that "*summum bonum*" of the average gynecological practice. "How many times have you permanently arrested a long standing uterine discharge by means of topical applications?" is a question put by Dudley to scores of physicians who enjoy large practices. The replies have been significant. In the vast majority of cases the answer has been 'not one' or 'very few.' The same author ascribes two causes for the general failure of local treatment, first, improper selection of cases and second, medicaments improperly applied. Ordinarily the medicament is carried into the uterus when the organ is full of secretion and the drug wastes its energy in chemical combination with the secretions and fails to come in contact with the diseased endometrium. We quote from Dudley further; "The prerequisite to safe and efficient intra uterine applications are first, a clear understanding and definite appreciation of what the application is to accomplish; second, preparatory disinfection of the vulvo vaginal surfaces, dilation and washing of the endometrium." The indications for even such local treatment are comparatively few but when present, the manipulations should rise to the dignity of a surgical procedure. Anything short of this is a frequent source of traumatism and danger."

Understanding that the field for topical applications is narrow, we would not resort to needless and continued local treatment with the hope that somehow we would see improvement come from somewhere.

If you are going to make a local application, make it to some purpose. Thus if you wish to overcome some local point of bacterial invasion, cauterize. If you have an excoriation of the vulva and side of the thighs, from an irritating discharge, put in a vaginal tampon, until you can arrest the discharge.

In the matter of tampons, if you want a carrier for medicaments, there is nothing nicer or more comfortable to your patient

than lamb's wool. If it is drainage you want use gauze while the nonabsorbent cotton makes the very best tampon for the correction of displacements or arrest of hemorrhage.

I think these few suggestions will serve to illustrate what I mean by having a definite purpose in view when we undertake gynecological procedures of a local nature.

I believe that the greatest triumphs in gynecology from this on are to come not from tampons and iodine but, to quote from an authority of a hundred and fifty years ago. "from an improved knowledge of the state of the fluids." What we need in gynecology more than any other thing is a speculum which will enable us to see through the vagina into the general symptom complex.

SURGERY OF THE STOMACH.

BY JOHN R. WATHEN, LOUISVILLE.

It has in recent years been quite positively demonstrated that many pathological conditions in the stomach and duodenum, which have resisted all medical treatment, can be cured, and cured only by surgical procedures.

The clinical data, already collected of stomach operations, has been most encouraging and gives promise of a great future for the many and varied diseases of this organ. Many cases diagnosed chronic dyspepsia, and treated for a long time by the physician without any permanent relief, are not the result of functional disturbances or changed secretions, but are due to pathological states which interfere with the normal motility of the stomach and duodenum.

Schachner has recently written: "The greater part of our knowledge of the pathology of these as well as other conditions has largely been based upon observations made at the post-mortem table. Valuable as this source of information is, it is nevertheless very misleading in that it only deals with the late changes of the disease and frequently with little or no reference to primary or even secondary changes that preceded the late manifestations. It is only since the post-mortem observations have been supplemented by studies at the operating table that our knowledge of the pathology of these conditions has really become throughout a trustworthy and an unbroken story. Therefore, it is apparent that an early revision of the chapters upon the diseases of the stomach must become an inevitable necessity. Much of the failure in the treatment of diseases of the stomach is due to the inability to

grasp the idea that the stomach is something more than a mere container, in which chemical changes are occurring. In many cases the changes are primarily motor or mechanical in character and the chemistry of the digestion is not disturbed until relatively late in the trouble."

Laboratory methods of diagnosis in gastric disease have never been able to render much aid until the pathological processes have advanced beyond the time when the best curative results could have been obtained by early surgical intervention.

Wm. Mayo has well said:—"The scientific zeal with which the diagnosis is sought has been in itself a distinct danger. The suspicious case is often kept under observation too long in the hope of making a positive diagnosis. The surgeon should not ask the physician for a diagnosis of gastric cancer; if we wait for that we are pretty sure of being too late. It is the suspicious cases which should be explored and it is the duty of the physician to urge this when in doubt."

Post-mortem statistics collected from the largest hospitals have shown gastric ulcer either in a recent form or as an old scar, to occur in 5 per cent. of cases; also, that about 2 per cent. of all deaths are from gastric cancer, and that of all the cancers occurring in the body, gastric cancer constitutes the most frequent and is estimated at about 30 per cent.

Mayo has reported that about 60 per cent. of his cancer cases were clearly traced to a previous ulcer as a base.

The fundamental principle underlying all surgical treatment has been that of drainage, in order to overcome any condition which interferes with the emptying of the stomach and this problem is plainly one of mechanics.

A gastro-enterostomy is an anastomosis between some portion of the stomach, usually the lowest and posterior aspect and some part of the small intestine, preferably the first portion of the jejunum.

Gastric ulcer, or some of the later results of this condition, which are many and varied has usually been the principle indication for this operation.

Louis Frank has recently written:—"If our dyspeptics, our patients with chronic indigestion, were more closely investigated, not only would they be spared many of the sequels of this condition, but timely operation would save much suffering and discomfort as well as enhance the possibilities of cure. We would not be understood as offering as a general proposition that every chronic gastric

ulcer should be operated as soon as diagnosed, but we do believe and maintain that this eventuality should be borne in mind, and that after a thorough course of medical treatment, properly carried out in intelligent hands without improvement of decided character, this eventuality approaches a probability and should be so stated to the patient." * * * * "There is no operation in surgery which gives better results, which gives more complete satisfaction both to the patient and to his surgeon than gastro-enterostomy for chronic ulcer of the stomach."

The stomach, in these cases of chronic dyspepsia, which has resisted all medical treatment, is usually found much dilated, due to a spasm of the irritated muscular fibres at the pylorus where the ulcer is most often found. Drainage of this organ at a more dependent portion the pylorus places this part of the stomach at rest and allows nature a chance to heal the ulcer.

Hemorrhage from the ulcer usually ceases quite promptly after this operation and healing occurs. Rodman has lately written:—"It does not remove the lesion, but simply overcomes, in a mechanical way most of the resulting symptoms and in many, perhaps most instances, this is all that can be accomplished by judicious surgery."

Gastro-enterostomy not only affords the only rapid and logical cure of ulcer, but is of great service in even the inoperable gastric cancers.

It is also part of the technique in complete resection of the cancerous pylorus.

Mayo has said of gastric cancer:—"In the history of medicine we have no recorded example of a cancer of the stomach cured by medical means, yet for some reason or reasons, such cases are sent to the medical men, are entered in the medical wards of the hospitals and subjected to treatment which must result in 100 per cent. mortality. So true is this that, while suspected cases of cancer of the breast, the uterus or the rectum are at once sent to the surgical side from the outpatient department, the possible victim of cancer of the stomach, even with a suspicion amounting almost to a certainty, is still sent to the medical ward. Yet, of all diseases, cancer of the stomach is most surgical. External carcinomas may be treated by plasters, badly, it is true, but occasionally with success. Superficial epithelial growths sometimes disappear, at least for a time, under the X-Ray. But gastric carcinoma has not even the small chance of relief which may be afforded by these very uncertain agents."

In the operation of gastro-enterostomy many different methods have been employed, all with the same purpose of drainage—direct from the lowest portion of the stomach into the intestine, placing at rest the pylorus and the duodenum.

In order to determine the best technique to employ in this operation, W. H. Wathen, recently addressed questions to ten of the best-known foreign and American surgeons and the conclusions from a study of their replies were as follows:

1. Some cases of acute and subacute gastric and duodenal ulcer, and many cases of chronic and duodenal ulcer, should be treated by efficient stomach drainage into the duodenum or jejunum.

2. Drainage by pyloric divulsion, and by pyloroplasty with its modifications, has not been successful, and these methods are now practically obsolete.

3. Gastroduodenostomy as modified by Kocher and Finney, may give efficient drainage in many cases, but it should be limited to such patients as can not be operated on by a posterior retrocolic gastroenterostomy with the anastomosis near the duodenojejunal flexure.

4. Anterior anticolie gastroenterostomy should not be an operation of election, but an operation of expediency and necessity, to give temporary relief, or to meet special abnormal conditions that may contra-indicate the posterior attachment.

5. The ideal operation of election must be the posterior retrocolic attachment near the beginning of the jejunum, and at the bottom of the stomach in the pyloric end, thus eliminating the loop.

6. This gives the most efficient drainage, prevents the vicious circle and regurgitant vomiting, leaves stomach and intestine in nearly normal relation, and is followed by better immediate and ultimate results.

7. The intestinal incision should be made longitudinally and not less than two inches long and the stomach incision of corresponding length, preferably in the oblique direction. An elliptical strip of mucosa should be excised from both stomach and intestinal incision.

8. The anastomosis is best made with a continuous suture (Pagenstecher or silk) using a full curved round-pointed needle. The suture should be applied in double layers, the inner to include all the visceral layers, and unite the cut edges of the opening; the outer, one-fifth inch away, to include the serous and sub-serous layers.

9. Enteroenterostomy, or closure by suture constriction or resection of the proximal jujunum of the pylorus is contra-indicated. It commits an unnecessary traumatism and leaves a deformity that may cause immediate and subsequent bad results.

OFFICIAL ANNOUNCEMENTS.

METHODS AND RESULTS OF ORGANIZATION WORK IN KENTUCKY.

J. N. McCORMACK, M. D., BOWLING GREEN.

(Chairman of the Committee on Organization of the American Medical Association.)

As is generally known, I have been working outside of my own state almost constantly for the past five years. When the opportunity came for me to make an itinerary here, the importance and possibilities of it were fully realized by all those in authority in the State Medical Association, and everyone lent a willing hand.

PRELIMINARY WORK.

Dr. Bullitt, state secretary and editor, took up the matter systematically in the Kentucky State Medical Journal, explained all our plans and purposes, and showed how and why it was a work of much practical importance in the daily life of every physician and citizen. He urged every county society to meet and to discuss the matter freely, and to indicate to their councilor where the meetings could be held to the greatest advantage in each district.

When the profession had been thus fully advised, a meeting of the council and all other officials of the State Medical Association was called to work out the details, and especially to solve the difficult problem of inducing the laity to come out to hear a doctor talk. I attended this meeting and gave to these earnest men, each of them my personal friend and co-worker in many legislative and other contests, the benefit of my experience in other states, and explained fully what was expected of them and of their county societies, if the best results were to be secured. After full discussion it was decided to confine the appointments to counties where the profession was already so well organized as to give promise of good audiences of both the profession and public, without regard to the size of the town or city. It was also decided, in order that I might speak in as many counties as possible, and because I had already met the societies more than once in almost every county, that afternoon and evening meetings should be held daily, at easily accessible points, and that all of these should

be for the laity. All these things understood, and the places of the meetings in each district decided, the order and dates of the appointments were courteously left for me to arrange with the aid of a well-informed railway passenger agent. The itinerary was published in the next issue of the State Journal, marked copies of which were sent to every physician of the State whether a member or not, with ringing editorials urging each of them to arrange to attend one or more of the meetings with their leading lay friends and patrons. As will be remembered, the itinerary covered all except the southwestern and northeastern districts, which are to be visited at a later date.

About two weeks before the meeting in his county or district, each physician, whether or not a member, or even eligible, received a personal letter from Dr. Bullitt, enclosing the itinerary, urging him to attend and to bring his wife and his influential patrons. A few days later, he received a similar letter from his councilor, couched in different terms, followed, later on, by one from the secretary of his county society, all with the same end in view. All these letters were prepared in Dr. Bullitt's office, and sent with addressed and stamped envelopes to the respective officials named, and needing only their signatures before mailing. I have licensed every physician in Kentucky, of every school or system, and know most of them personally. About two days before the meeting in his district or county, each of them received a personal letter from me, telling him why and how he ought to try to make the meeting a success. I told him that I expected in my talk to explain fully what should be the relations between the doctors and the people, and, in a plain, practical heart-to-heart way, would show that every true interest of theirs and ours were inseparable; and that I would show that the poverty so prevalent in the profession is far more important and dangerous to them than to us, illustrating this by example after example, from the experience of a long and busy life. I told him that I could only hope to make the meetings helpful to him if he and his patrons, good men and women, were present, but that, if he would get them there, I promised in advance to make it worth more than a month's practice to him, and this would be one of the least of the benefits. It was easy to reach the profession in this way because both the State Association office and that of the State Board of Health, which work hand in hand in everything, have a constantly revised card-index register, so that practically none would be overlooked. The aid of the newspapers was

also enlisted in every county. This was the easier because the press has co-operated in all the public health work here to an extent probably not true in any other State.

All this cost time, effort and considerable money, but the council considered it an excellent investment; the result proved that they were wise in doing so. They considered it as just as it was wise. The American Medical Association generously proposed to meet all the direct expenses of a work undertaken solely for the instruction and uplifting of the profession and people of Kentucky. It was known that I had never taken an application for membership in that Association, or a subscription for the JOURNAL, and never intended to do so. It was expected, on the other hand, that the membership in the county and State societies would be largely increased, and it was felt that no labor or expense should be spared to make the meetings successful. Now for the outcome.

THE MEETINGS.

Of the forty-four meetings arranged for, all but two were well attended, and the profession in these two counties broke down after the appointments were made. Physicians came with their families and patrons, often from far-off country districts and adjoining counties, and some of them attended two or more meetings. Lawyers, teachers, ministers, editors, farmers, bankers, merchants, city and county officials, with their wives and daughters, made up the audiences, and took an active and intelligent part in the discussion which always followed my talk. It was interesting to learn from the discussions, as well as privately, that no laymen of the thoughtful classes, those whose attendance was especially important, was ever present except on personal invitation from his physician, or a written one from his county society. Many said they had read the newspaper notices, and that these had done good in reminding them of the hour, but all of them said they would have looked on it as a medical meeting, a dry, technical lecture, and a good thing to keep away from, but for the personal explanations of, and cards from, their medical friends.

The circuit courts were in session at seven of the appointments and it was feared at first that, on this account, lawyers and court officials would be kept away. In each instance, after consulting the bar, the judge adjourned his court when the hour arrived, after announcing the meeting, and urging its importance. Always the judge either presided at the meeting or took an active part in the discussion. A most gracious and gratifying in-

stance of this kind occurred at Richmond, where the appointment was for the afternoon. A great will case was being tried and attorneys were present from distant parts of our own and other States. Before noon Judge Benton, a great jurist, announced my meeting in his court-room at 2 o'clock, and that court would adjourn at that hour, and urged that all be present to hear matters discussed of the most practical importance to every citizen and family. The result was one of the largest and most appreciative audiences I have ever addressed. Nor was this all. I was to speak in Judge Benton's home city in the evening. He took the train over with me, gave his time to getting his legal and other friends out to the meeting, and took an active part in the discussion there.

THE FOUNDATION OF THIS WORK.

The professional and public sentiment which made possible the conditions indicated in the foregoing account had resulted from the systematic, patient, persistent efforts of a few devoted men in every county for years, often in the face of difficulties and discouragements which seemed insurmountable. Eighteen years ago the medical law was so defective as to be only an annoyance and expense to reputable men, with practically no restrictions for the vicious classes, as is now the case in most States, and Kentucky was a paradise for quacks. The cities were full of fake medical institutes of every kind, wonder-working cure-alls were announced under alluring headlines and pictures to make monthly visits to most county seats, "for one day only," and nostrum vendors, with music and clog dancers, ridiculed and maligned the profession and fleeced the people; and these were looked on as things only to be endured, as they still are in many States. Under the leadership of a few men in each county, as has been said, the profession was gradually awakened to a realization of its moral and political power, and it was decided that these conditions were intolerable. The physicians got in touch with the leaders of the dominant party in each county, especially with the lawyers and editors, and explained that their work was unselfish; that they only sought to protect the people from ignorant and dishonest pretenders, and to protect the profession from the odium brought on it by these classes. They worked with, and not in antagonism to, these leaders, in the primaries, so that members of the profession of both political parties could act as a unit, and always quietly, not only as becoming to a body of scientific men, but also because the most effective work could be done in this way. Thus in a

few years it came about that the 4,100 medical men of Kentucky had more political power than any 25,000 other people in the State largely because those of every school or system were so united, because it had been proved that they had no selfish ends or ambitions to serve, and quite as much so, probably, because they tactfully worked with, and not against, the political leaders, used no brass bands or other ostentatious methods beforehand, and indulged in no idle boasts or threats afterward. Doctors, especially country doctors, if they can be aroused to the fact of its possession, and of the importance of its proper exercise, have more moral and political power in the community, and better opportunity for bringing it to bear, than all the other learned professions combined, and legislators, judges and other officials, ignorant or dishonest enough, usually the former to pander to quackery, or to oppose the enactment or enforcement of beneficent measures for the protection of the best interests of the people, soon found themselves retired to private life, where they could think it all over, by an influence with the voters only the more powerful because it was intangible. Still more important, honest, capable officials found that they were supported by the same quiet confident power, and that an intelligent, fearless discharge of duty made a reelection or promotion easier and less expensive.

Soon the outcome of all this was a new medical law which required every physician in the state to re-register, and which left all the quacks outside of the breastworks; a carefully selected and fearless medical referee in each county, supervised the work and endorsed only reputable applicants, each of whom, as a part of his application, made oath that he had never been an itinerant or advertising doctor, and would never become such, if a certificate were granted him. It was not a stronger or better law than most other states have, but it could be better enforced because it was supported by public sentiment, especially by the legal profession and press, and still more by a medical profession which knew by long training exactly what it was after and how to get it. The quack concerns, the Copelands, K. & K.'s, and others great and small, made a long and desperate legal fight to hold their ground. The board and its individual members were plastered over with fake damage suits, but no inch was ever yielded, no time, concession or exception was even considered, and as soon as the laws could be construed by the courts of last resort these quacks were driven from our

border, and for fifteen years no itinerant or advertising doctor has been permitted to practice longer than was necessary to secure evidence for his indictment and conviction. Of course this law and the oath referred to do not apply to ethical professional cards.

POLITICAL AND ETHICAL WORK.

This was a semi-political work, and long antedated the reorganization of the profession on the Association plan. This movement was most timely for Kentucky especially, as it gave system, permanency and a solid foundation in the county societies, to a reform which it would have been difficult to maintain otherwise. The State Board of Health, which is also the State Board of Medical Examiners, has always considered itself in effect only the executive committee of the medical societies represented in its membership; it has been strictly a non-partisan organization and, at the same time, paradoxical as it may seem, it is in the closest possible touch with both political parties. In order to make this desirable status a certainty for all time, the law was so amended as to provide, when a vacancy occurs, that the society to which the place belongs should send in three names to the governor, from which list the nomination shall be made. As the three medical members who, with the county judge, and usually the county attorney, compose the county boards of health, and the medical referees, are appointed by the state board, as professional appointments of all kinds are restricted to members of their society, and as most of the influential representatives of all the schools are members of their societies, the practical result has been not only a solid but an active profession back of both the medical and health laws, and of all legislation agreed on. At present the work of the State Board of Health, the State Board of Medical Examiners, the State Medical Association, the *State Journal*, and the surgeon-general are all conducted in the same office. This is a great convenience; it co-ordinates the efforts and makes them more effective, but is being done at a personal sacrifice which may make its continuance impossible for a great length of time. Even before this arrangement was made the policies and work of these bodies were always considered inseparable, and will be so continued under any circumstances.

The osteopathic question gave our profession much serious concern. Under the construction of the courts, the law made no provision for dealing with the matter and the osteopaths had obtained a strong and noisy following in the state before any plan of

action could be laid out. The solution reached was not ideal, but it has given entire satisfaction to all concerned. They have a representative on the board, an educated, capable man who insists that the adherents of his system shall come to the highest standards and be held to the most rigid observance of the law. They take the same examination that all other applicants do, an absolutely secret and impartial one, and each of them takes an oath not to attempt to perform operations with the knife or to administer drugs internally, and the same oath that all others do, not to advertise. Gaining wisdom from our experience in this matter, and knowing of the neuropaths, vitopaths, naturopathies and similar cults and sects, our law now contains ample provisions for the examination of the adherents of any other system of healing now in existence or which may hereafter be discovered.

As in other states the question of regulating and raising the standard of medical education, and especially of the entrance requirements of students, has had the serious consideration of the board, the schools and the state association for several years. Recognizing that the responsibility for the old system lay at the door of the entire profession, rather than the schools, as many superficial observers have been led to believe, that many of our best friends, in the best of faith, had invested almost their all of both money and reputation in these institutions, and that the reforms needed must come by evolution and consolidation, and not radically, every possible interest has united. In this work, honest differences of opinion have arisen, as was natural between men of strong character and convictions, who had important interests to guard. The schools often thought that the board was going too fast, and the board was equally sure that the schools were not moving fast enough. It was always found that these differences could be easily adjusted by means of frequent, frank conferences, and that misunderstandings sprang up only when these were omitted. For two years a certificate from the state examiner, elected by the board, has been required for students entering any college in or outside of the state, as a condition of recognition for such college, a rigid but fair examination is required for those without diplomas from recognized high schools or colleges, the economic course recommended by the Council on Medical Education has been made equally obligatory on all schools in or outside of the state, and it is believed that the grade of the examination for license has been equal to that of any

other state. Partly as a result of this conservative, helpful policy, probably, four of the schools have recently united into two, giving us three instead of five, and in every way the outlook is encouraging. The same course has been pursued in dealing with the other schools or systems of practice. The representatives of these schools have always been most efficient and cordial co-workers on the board for the highest standards and for every true interest of the entire profession, and, although there has been the most perfect frankness about everything, no sectarian question has ever arisen for discussion.

WORK DIFFICULT AND INCOMPLETE.

If any one should get the impression from what has been said that it has been easy to do any or all of these things, and, with this idea, try to do it in his own state, he would make a great and most unfortunate mistake. If he should get the impression that present conditions in Kentucky are satisfactory and the organization is complete, or half, or a quarter done, he would be still farther from the mark. Each advance, each step forward, has required the united, patient, thoughtful labors of the leaders of the profession in every county, and none know so well as do these devoted men that the work is in its infancy, that we are just getting in a position to meet the responsibilities and reap the benefits of real organization for both the profession and people in a few localities. Postgraduate schools, modest, but practical and effective, have been started in fourteen counties, and others are in contemplation and joint meetings with the other vocations are being inaugurated. In other counties, with the highest class of men composing the profession, except as to legislation and such matters as the insurance question, which was practically settled in a fortnight, the leaders even have not awakened to the importance and possibilities of organization, or to what it might be made to mean to them individually. On investigation it nearly always develops that the causes for this are personal, usually between the local men, sometimes because others have attended and gained a prominence in the state work while they remained at home. Exceptionally a few of the leaders, enough to mar the work in their own county, usually the very best of fellows personally and professionally, with only personal and local interests to consider or serve, failing to grasp fronting those charged with official responsibility for the time being, or not appreciating what has already been accomplished for them, their profession and the state by the very men and policies they condemn, on some

suggestion of theirs being refused, with or without good reason, take offense where none was intended, nurse their grievance until it becomes real, and blindly do incalculable mischief, fortunately confined to their own locality and friends, with the same good intentions and cheerfulness as if they were going forward instead of backward.

The only way to meet such difficulties, and all others which confront the profession, most of them from lack of training of students in regard to all these practical matters during the college course, is a practical, persistent, tactful work, never failing good temper, and even-handed justice to every interest on the part of those charged with the responsibility of doing it, and the constant demand that medical schools shall give a practical course in business, ethics and organization, essentials in every-day life work of the physicians, to future students, or else close their doors. Leading in all this in Kentucky is a devoted, self-sacrificing board of councilors and state society officers, excelled by no other state, and back of them because of what has already been accomplished, is a profession, probably more united and enthusiastic on the whole than can be found in any other state. With the headway already gained under such a leadership, and with such a following everything desirable seems possible unless a slip is made somewhere. Of all things most importance is attached to the fact that the state association, the county societies, the state and county boards of health and every other professional interest, are so dove-tailed and interwoven that all work constantly together for the common good.

SELECTED ARTICLES.

THE PHYSICIAN AND THE NOSTRUM.*

By Edward Bok.

Editor of the *Ladies' Home Journal*.

PHILADELPHIA.

During the four years that we have been engaged in the work of arousing public interest in the evil of "patent medicines" it has been my pleasure, in common with others, to have received hundreds of approving letters from physicians all over the country and scores of complimentary resolutions from medical bodies. And it is my sincere hope that the few words I shall say to you this evening, in my first appearance before a medical body, may not be accepted as being in any way un-

appreciative of those remarks of approval. I appreciate and value them.

But I feel that the time has come, if we are to succeed in the fight in which we are engaged, to be perfectly frank as regards the relation of the medical profession to proprietary medicines. I am going to try to point out to you that in two distinct ways the medical profession is to-day absolutely hindering us laymen in our fight and clogging the wheels of further progress. First, in your inactivity where you should be active, and, secondly, by your direct cooperation with the "patent medicine" traffic.

Every man knows that the life of a nostrum depends on publicity, and one of the first things we did in our fight was to see to what extent the press could be persuaded to close its columns to the advertisements of "patent medicines." It was not easy, for the business office of a paper or magazine is very powerful. Yet to-day scarcely one of the reputable monthly magazines will accept a "patent medicine" advertisement, and the same is true of the prominent weeklies. The best of the farming papers, are to-day immune from this advertising. Pressure is being brought on the religious press that will soon result in a general cleaning up of those papers. Progress with the daily newspapers has been slower; still, there are forty-three daily papers, large and small, to-day that will not accept "patent medicine" advertisements. Now, gentlemen, remember that such a step means a great deal in the revenue of a periodical. I know a magazine that could easily increase its advertising revenue six figures a year if it accepted "patent medicine" advertisements. I have no doubt that if the *New York Times* and *Philadelphia Ledger* admitted this business these two papers could increase their revenue by at least fifty thousand dollars a year. Many of these papers and magazines have taken this stand on principle; others because of the pressure brought on them by their readers. The public at large has been writing to its newspapers insisting that those advertisements shall stop; the church people have been writing to their papers; the farmers have been writing to their papers—all classes of the public have been busy; all classes, gentlemen—except the physicians. Look at your average medical paper—recking with the advertisements of proprietary—so-called ethical—preparations. And not only advertisements, but reading notices palpably intended to deceive. The very class of papers that should have been the first to cleanse their pages is to-day the last to make

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even a move in that direction, and stands today, in this respect, as a discredit to honest journalism.

Now what is the result? I go to the publisher of a newspaper and ask him to clean his columns of "patent medicines," and he points, as he has done in many cases to me, to the medical press. "Why, man," he argues, "these preparations can't be so bad as your fellows make out, or they wouldn't be advertised in these medical papers. These medical publishers know better than you do what is good and what is bad in these 'patent medicines,' and what they allow to go into their papers I guess we can safely stand for."

That is why it is so important that the medical press should be cleansed of these advertisements: it is in the influence, the example that they exert on the lay press, and it is an argument on the part of the lay publisher that is very difficult to combat. It is this argument that again and again is used by lay publishers in writing to their protesting readers, and then these readers send the letters to me and ask, "Is this true? Are these advertisements permitted in good medical papers?"

Now, you know that it is true, and you know also that it should not be so, and yet what have you, physicians, done to stop it? You have, in your societies, passed resolutions, a very easy and comfortable thing to do and about as ineffective as it is comfortable. I have myself seen these resolutions received by the medical publishers, and disposed of with a grin—in the waste-basket. But what have you done as individuals? For let me tell you, as an editor, that the editor or publisher of a paper of any kind is mighty sensitive to the individual protest of his readers. When letter after letter comes in harping on the same subject, take my word for it; that editor or publisher is going to sit up and listen. Those letters are from the people on whom he depends for his support, and he is not turning a deaf ear to the source of his livelihood.

Let me give you an illustration of how this works. One of the most prominent daily newspapers began to get letters from its readers objecting to its "patent medicine" advertisements. The first few letters made no impression on the publisher, but as they kept coming in he realized that he had to make some sort of a show of being good. So he declined the most flagrant. When this fact became known to one after another of the "patent medicine" manufacturers, they argued that if this newspaper found it necessary to trim its sails to appease the public, it was idle for them to advertise at all to a public in that state of mind. So they stopped, and they

have stopped so effectively that the publisher of another newspaper, which readily takes any "patent medicine" advertising it can get, told me a few weeks ago that, while his paper had carried in the first eight months of 1905 over sixty-two thousand dollars' worth of "patent medicine" advertising, this year for the same eight months he had carried eighteen thousand dollars' worth. That is what can be done.

Now, while the people at large have been busy with their papers, I have not heard of a single, well-ordered and coherent movement on the part of the medical profession individually to do the same work with its papers. You have talked beautifully, but what have you done? The best proof of the fact that you have done practically nothing is shown in the condition of your papers, and yet, gentlemen, it was your duty, more than the duty of any other body of men, to do this. It is no excuse to say that physicians are too busy. There are men in our profession just as busy as you are. You have been inactive. You have allowed us laymen to work with our papers while you have sat idly by or made desultory attempts, where you should have taken a vigorous individual stand and stopped it. And you can stop it if you make the honest effort. You are the supporters of these papers; without you they cannot exist, and on you, directly and solely, rests the responsibility of the present situation that we as laymen can scarcely go any farther with compelling the cleansing of our papers so long as those papers can point to the medical press as its companion in perfidy.

You have two ways open to you:

Either insist as subscribers and readers that these papers shall cease these advertisements:

Or stop, as physicians, from prescribing these medicines yourselves and thus make this advertising unprofitable. Or both.

And this brings me, naturally, to my second point: your direct co-operation with the "patent medicine" curse—a co-operation that I confess, gentlemen, is nothing short of appalling. I give you my word for it that as one result of my investigation of this question there has come to me an amount of evidence as to the unintelligent prescription of secret proprietary medicines on the part of physicians that, if published, would tend to cause an amount of unrest and distrust on the part of the public that is mighty unpleasant to think of.

It is not for me, gentlemen, to diagnose the reason why physicians habitually prescribe proprietary preparations. Several of your

own writers claim because it is easier; others because physicians are lazy, and still others that your medical colleges do not adequately teach the writing of prescriptions. I do not know, for I am not competent to say, but what I do know is that this prescribing of these preparations seems to be on the increase to an alarming extent. Your own Doctor Jacobi says that in twenty-five years the percentage has grown from one in fifteen hundred prescriptions to 20 and 25 per cent. He also says that in a single New York drug store investigation showed that "70 per cent. of the prescriptions sent in by reputable physicians contained either nostrums, pure and simple, or as a part of a compound." Doctor Billings, of Chicago, says that in his city the records of one drug store showed 42 per cent. of prescriptions prescribing proprietary medicines, and in another 50 per cent. In Boston, 38 and 48 per cent.

Now, gentlemen, I will not gainsay that there are good proprietary preparations and that a physician, after a diagnosis of a case, and knowing his patient, and being fully aware of the exact ingredients in such an ethical preparation, is perfectly justified in prescribing it, if he feels that it meets the conditions of that case. Whether such a course is detrimental to scientific medicine is for him to settle with himself.

But there is a time when he is not justified in such prescribing, and when he closely borders on the criminal line, and that is when he prescribes a preparation of which he either does not know the ingredients or, what is even worse, when he has erroneous information as to those ingredients.

And yet this prevails to-day in the medical profession, and prevails to an extent that is almost impossible of belief to the layman. When I heard the first mutterings of this condition of things I gave no credit. While I knew that physicians were human and made their mistakes in common with us all, I could not believe that they could make *that* mistake. But instance after instance came to me until I could no longer turn aside, and I determined to find out. And recently I did.

Conditional that I should not reveal my source of information, nor give names of remedies or physicians, I was given an opportunity to examine 100 prescriptions that had been filled. Of those 100 prescriptions, 42 prescribed a proprietary drug or article in part or in whole. I selected 30 of these, and called on each of the physicians who had written those prescriptions. Now, gentlemen, those physicians were men of excellent standing, some very high in their profession, and

how many of those 30 physicians, would you say, gave me an accurate, or anything approaching an accurate, analysis of the ingredients of the nostrums which they had prescribed? How many? *Two*, gentlemen, *two* out of all the thirty! The rest either did not know, or—what is even more dangerous—thought they knew what they did not.

One of these prescriptions called for a certain headache remedy, given to a woman who was in an exhausted condition, who had weak heart action, and who, having read of the dangers of headache remedies, did not trust her own judgment, and called for her family physician. He gave her a remedy, saying that he knew it to be harmless, that it was entirely free of the powerful drugs of which she had read. Within half hour of taking the remedy the woman's lips began to get blue, she went into unconsciousness, and it required all that two doctors could do to bring the woman back to consciousness. The remedy contained 61.5 per cent. of acetanilid! The physician, when I saw him, showed me his proof on which he had based his knowledge, the statement of the manufacturers, whom he said were reputable people! —a statement, as I happen to know, written by a man who never went to a medical college, a man whose word every physician would scorn to accept did he know him. When I showed him my analysis he was dumbfounded and confessed he hadn't known. *But, gentlemen, he should have known. It was his duty to know!*

Another prescription called for a certain tonic that the physician told me was one of the most reputable tonics known to the profession; its ingredients of quinine, beef and iron were universally known and nearly all physicians prescribed it. One of its greatest virtues was, he told me, that it was non-alcoholic. I proved to him that the tonic did not contain even a trace of beef or iron, but that it did contain 22 per cent. alcohol. He could not gainsay my authority; he was surprised and confessed that he had not known. *But, gentlemen, shouldn't he have known?*

One of these prescriptions gave to a child a remedy calculated to soothe its restlessness. It did so, so effectively that the parents changed their physician, went to another, who prescribed another remedy, and the child lay in a stupor for two hours. I saw both of these physicians; they confessed to me they did not understand the case. But I did, gentlemen, for both of these physicians had given that child morphine concealed in "ethical" proprietary preparations, and when I proved this to them they were amazed and confessed they hadn't known. *But, gentlemen, should*

not a physician, prescribing for a child know?

Five of these prescriptions called for a certain tablet supposed to build up the system in extreme case of weakness, and especially given to women at certain periods of physical drain and exhaustion. All of the physicians assured me that these tablets were among the few ethical preparations that could be absolutely trusted, and each showed me a printed formula of their contents. These tablets, I was told, contained among other things iron peptonate, two purely vegetable compounds, and extract of nux vomica. "The best on the market," said one of these physicians to me. As a matter of fact, those tablets contain not the slightest trace of iron peptonate or nux vomica, but do contain two principal ingredients—starch and liquorice! And yet, gentlemen, these same tablets, I have learned from careful and authoritative sources, are to-day being prescribed by a large number of the best physicians of Philadelphia, and when I have asked several of them on what authority they were accepting their ingredients I was shown a printed formula by the manufacturing concern!

Some time ago, finding it necessary to know about a certain nostrum advertised to the public, and having no time to make an analysis, I consulted five physicians in order to reach a necessary decision. All five physicians told me that the preparation contained a dangerous amount of cocaine in it; that it was well known for containing that ingredient. I made my decision—only to find that I had made a wrong decision. The preparation contained not a trace of coca or cocain and never had. *Gentlemen, these physicians did not know. But they should have known, or else not have said what they did.*

And so I might go on; not isolated cases, not a case here and a case there, but a condition that is dangerously general.

Now, what is the result? The physicians are doing precisely what we are asking the people not to do: not to use these "patent medicines," because they do not know what they contain. What effectiveness can I make to such an argument when people write to me by the score citing instances of revealed ignorance on the part of the physician of the preparation which he prescribes, and rightly say to me, "how do you explain this?"

Can I explain it, gentlemen?

Dr. Jacobi calls this practice not far from criminal, and I would rather have him say

it than say it myself. But it is mighty serious condition, and nothing confronts us laymen in our fight so insurmountably as this argument that can be advanced against the medical profession.

We are trying to separate the public from the nostrum, and have in a measure succeeded. But what are you doing? Now, let me bring this question home to you—home to the physicians of Philadelphia. Are you aware of the fact that this practice of prescribing nostrums has so insidiously grown on you that while in 1905 an examination of several thousand prescriptions written by Philadelphia physicians showed 41 per cent. to call for "proprietarys," this year, so far, the average shows 47 per cent. ? Are you going to do more and more each year what we are asking the people not to do? If you are going to prescribe "patent medicines," why should the layman pay your fee as a physician in addition to the cost of the medicine which he can buy himself? We are preaching to the public to stop the nefarious habit of self-doctoring, but physicians, by such methods as these, are driving people to doctor themselves, driving them to the quacks and the charlatans. There is no question that the whole practice has grown out of thoughtlessness. But has not this thoughtlessness gone far enough?

Evidently, gentlemen, the Council on Pharmacy and Chemistry of your national association was created none too soon. But even without access to the analysis of the council, the physician has no excuse. Opportunities are open to him to learn the ingredients of the medicines he prescribes, and if he has no time to find out he has no right to prescribe what he does not know.

And so gentlemen, you who should be with us laymen in our efforts to stamp out this evil, are not only making our fight the harder, but you are actually hindering us. We look to you for help, as I think you will agree we have a right to do in our efforts, and what do we get from you?

Unctuous words, but unclean hands.

Now, I ask: Is this fair? Is it playing the game, gentlemen?

You are here to-night to discuss the question of the suppression of quackery, but it seems to me you have chosen the wrong topic. Your question should be the suppression of the *physician* in his *aid* of quackery.

FIRST HOUR SURGERY IN STRANGULATED HERNIA.*

By J. G. CARPENTER, M. D., STANFORD.

This gospel is profitable for instruction; reproof and correction and the practitioners shall be made perfect through surgical righteousness.

First hour diagnosis and first hour surgery, in competent hands, with aseptic measures, should save all cases of strangulated hernia, appendicitis, intestinal obstruction and ectopic pregnancy, and the mortality should read not more than 1 or 1-2 or 1-10 of a per cent.

There has been a time in the history of every case of strangulation when life could have been saved; the operation for radical cure successfully performed; and the patient restored to health by early diagnosis, a minimum of anaesthesia, a minimum of taxis, a minimum of shock and first hour surgery.

It is the old story of the early bird catching the worm. Thousands upon thousands of lives could have been saved in the past had the medical attendant not seen through a glass darkly and the patient, family and friends not have been prejudiced against skillful, life-saving, conservative surgery by the ignorant, unscrupulous medical pretender.

The true surgeon is predestined, elected and made by the Almighty for the practice of surgery. Medical Schools have turned out, and are continuing to turn out hordes of incompetent medical men upon a long-suffering public, incompetent to make an early diagnosis and do a minimum of taxis, and who are thorough failures as diagnosticians and operators. They "shilly shally," "dilly dally," narcotise the patient with morphia, procrastinate and hope for a more convenient season. They have little knowledge of hernial anatomy, and less of pathology.

Early taxis, a minimum of taxis, 5 to 15 minutes without doing harm to the constricted intestinal tumor, with the advantage of position, gravity, relaxation of muscular tissue, control of peristalsis, frigeration and refrigeration of the involved area, with or without anaesthesia, will reduce most hernias by diminishing the blood supply, tension, tenderness, pain and size of the constricted mass.

Inversion of the body *a la* Trendelenberg, with flexure and relaxation of the muscular, tendinous and aponeurotic tissues of the

lower limbs, hips and abdomen, will relax and enlarge the constricted rings and canals. Inversion of the body diminishes the intra-abdominal pressure and allows the pelvic and abdominal contents to gravitate towards the diaphragm.

Cold, by its therapeutic action, viz. astringent, constricting, hemostatic, anti-phlogistic and anodyne virtues, when locally applied, minimizes both active and passive congestion and reduces the size and volume of the hernial tumor, without structural lesions to its contents or intra-abdominal tissues.

If the tumor is seized and slight traction is made in the axis of the ring, the blood vessels are straightened and this is a contributing factor in relieving the passive congestion. In the absence of cold or sulphuric ether locally, hot moist applications, the temperature of the blood, are detergent, antiphlogistic, anodyne, and support the vitality of the hernial tumor.

Evacuation of the stomach and bowels with the stomach pump and high enemata reduces the intra-abdominal pressure, allays intestinal peristalsis and removes pathogenic micro-organisms and abnormal secretions.

If early diagnosis and taxis reduce the hernia, the patient and family should be advised of the constant future impending danger that daily jeopardizes the life of the patient by a return of the strangulated hernia and with his or her consent, prepare the patient by rest in bed, free purgation, restricted liquid diet, hot water and soap bath,—and the patient prepared, operation should be done for radical cure.

Should gentle taxis fail to reduce the hernia in fifteen minutes, with the aid of the above therapeutic measures, from the time taxis was begun, an herniotomy should be done at once to relieve the strangulation, and the operation done, at this time, if feasible, for radical cure.

This is ideal common sense, skillful up-to-date country surgery, whether it be done in the garret, cellar, log cabin, fence corner, in possum hollow, on raccoon ridge, the cottage, palatial city, or country home, the private or the dirty city hospital with dirty white coat internes and incompetent nurses.

It can be truthfully said that any room or number of rooms in the village, town, city or country, can be cleaned and sterilized and converted into an up-to-date hospital for one or more patients.

The common sense educated, skillful, up-to-date country surgeon, with a kettle of hot water, soap, alcohol, sulphuric ether, can render the field of operation sterile, and per-

*Read before the Kentucky State Medical Association, Owensboro, October 11, 1907.

form the herniotomy, and the operation for radical cure when practicable; save the patient's life, make him or her a new creature, add joy and happiness to patient, family and community, and incidentally hear the shouts of well done thou good and faithful surgeon, and feel his pockets jingle with much gold.

Yet in abdominal and pelvic surgery cases, the surgeon only gets a fee now and then, and that is too often a small one; about one or two fees in every ten cases of surgery.

But should the early diagnosis of strangulated hernia not be made and the essential taxis delayed for hours or a day or more, then the weal of success is turned into woe. Structural lesions begin quickly, and serious complications soon follow. First a constriction in the ring, canal, sac or ring and sac; an active and a passive congestion, more especially the latter, with tenderness, pain, heat, redness, tumefaction in the hernial sac and contents, the redness changing to dark purple or black; transudation of the liquor sanguinis, diapedesis of the leucocytes, localized oedema, localized peritonitis and coagulation necrosis at the ring, constriction at neck of sac by bands of adhesion within the sac or a twist of the intestinal loop in the sac, the points of greatest constriction and most remote from the centre of circulation, with sloughing areas or spots, or finally a gray greenish or brown color is proof of gangrene, of one or more inches or a foot or more of intestine, or the latter and hernial contents, ending by shock, general peritonitis, exhaustion and death.

Delays are dangerous in religion, business, finances, war, love, and doubly so in strangulated hernia. An herniotomy to the man that knows how is an easy and simple operation; to the man ignorant of hernial anatomy and pathology, unskilled in the technique of hernial surgery, it is a very dangerous operation; not only dangerous to the life of the patient, but to the incompetent surgeon's reputation, and has always been attended with a high mortality in the past.

Let each physician so examine himself and not diagnose and operate unworthily.

Let me repeat, there was a time in the history of every case of strangulated hernia when the life of the patient could have been saved.

The same is true with every case of appendicitis, ectopic gestation and intestinal obstruction. An aseptic field surgical equipments, a skillful, common sense, aseptic surgeon, two sponges, a pair of scissors, a probe pointed bistoury, a needle, and a few strands of silk and chromicised cat-gut, and two hem-

ostats, preceeded by an early diagnosis, with a minimum of taxis; early, quick, life-saving surgery and a minimum shock, a minimum of anaesthesia, should save all cases of strangulated hernia.

We surgeons have learned the wonderful secret and are not standing on the promise, but have stepped over the line into the promised land, that flows with milk and money. *Many a Moses might have entered had he become an expert diagnostician and skillful operator.*

Early diagnosis and prompt interference are necessary to prevent gangrene of the strangulated intestine. Inguinal hernias constitute 84% of all hernias; femoral hernia 10 %; umbilical hernia 5 %.

The immediate cause of the strangulation is not a constriction of the hernial ring, but a sudden increase in the hernial contents. The narrower the ring, the more unyielding the tissues that compose the ring, the greater is the danger of strangulation, if a sudden increase in the volume of the hernial contents occur; therefore umbilical and femoral herniae are more inclined to strangulation than ventral and inguinal.

The contents of the hernial tumor may be suddenly increased by severe intestinal peristalsis or increased intra-abdominal pressure; the bowels get distended, becomes parietic and the venous engorgement that follows is the direct cause of the strangulation, oedema of the parts below the constriction follows; then venous stasis and gangrene.

Gangrene of the strangulated intestine is not the result of an inadequate supply of arterial blood, but is produced by arrest of the venous circulation by compression or thrombosis.

If the hernial swelling is reducing in size by taxis and gets softer, it would indicate that the contents of the intestinal loop have been reduced, and that a successful reduction will follow by a continuance of the manipulation. If the size and hardness of hernia are not diminished after a gentle trial for ten or fifteen minutes, with patient fully under anaesthetic it is a waste of time and detrimental to the patient to persist in the efforts, and herniotomy should be performed without delay.

If the symptoms of obstruction are not relieved by the reduction, one of the following causes must be suspected: Return of injured and gangrenous bowel, peritonitis, reduction of hernia *en masse*, a second strangulated hernia. If a second hernia can not be found a laparotomy is the only course for the detection and treatment of the remaining

cause or causes of the persistent obstruction.

In doubtful cases it is safer to resort at once to herniotomy, rather than assume the risk of reducing by taxis a strangulated loop that when returned into the abdominal cavity might be the cause of septic peritonitis.

Prof. Ochsner states (*Journal A. M. A. Sept. 8th, 1906, Vol. XVII No. 10*) "It is a well known fact that it is practically impossible to keep a circular opening in any part of the body from closing spontaneously unless it is lined with a mucous or serous membrane. The anatomic relations at the femoral canal are such as to form ordinarily a definite circular opening. As early as 1879 Socin speaks of six of these cases which apparently were permanently cured by simply removing the hernial sac and suturing the skin.

The femoral opening is lined with the serous membrane comprising the hernial sac, which is an out folding of the peritoneum. In order to change this into an unlined circular opening which must necessarily close spontaneously, all that is necessary to do, is carefully to dissect out the hernial sac quite up into the peritoneal cavity, beyond the inner surface of the femoral ring; ligate it high up; cut it off and permit the stump to withdraw into the peritoneal cavity. Removing all the fat contained in the femoral canal and simply closing the skin, would complete the operation for femoral hernia.

This method is applicable to all cases of femoral hernia, in which an actual femoral ring exists. In 14 years' practice Prof Ochsner has done 30 or more operations for femoral hernia, none were followed by recurrences. Occasionally there is a case in which the hernia is of traumatic origin, and the opening is no longer regular and circular. Such a condition may not be closed spontaneously; in such cases there can be no indication for using this method. Neither is the method applicable to operations for strangulated hernia in which the femoral ring has to be cut to permit reduction.

In artificial closure of the femoral ring there is always distortion of the circular opening unless this closure be according to the method advised by Cushing, Marcy or Kousster;—consisting of a circular suture which does not interfere with the arrangement of the femoral ring.

Cushing's method is, 1st, Free sac well beyond the neck, transfix it, tie it off high as possible to avoid a funicular process; 2nd, Introduce a purse string suture of chromicised cat-gut through Pouparts ligament, the pectineal fascia and muscle, then out-

wardly through fascia lata covering femoral vessels and finally up through Pourpart's ligament, again coming out one-half inch from where suture was started; 3rd, Tie suture and obliterate femoral canal; 4th, Suture the skin.

Mr. William Anderson, London, about 18 years ago, began to operate on inguinal hernia, by simply removing the entire sac, ligating it and permitting the stump to retract and suturing the skin and in 25 years had operated on some 300 cases without a recurrence.

A femoral hernia in its descent is first downwards, then forwards, then upwards; to reduce it taxis must be done, first downward, 2nd backward, 3rd upward. Extension of leg and thigh, inversion or abduction lessen the femoral canal and increase the constriction of the hernia.

Flexion of thigh upon the pelvis with abduction and rotation inwards relax the femoral canal and its openings, this should be remembered in the reduction of a femoral hernia.

Senn states that the cutting should be done rather by pressure of index finger against back of the blade of bistoury, than by saw motion in order to protect the blood vessels against injury, the blood vessels becoming displaced, escape the cutting edge of the knife. In oblique inguinal hernia the cut is made in an outward direction to avoid wounding the epigastric artery; in case doubt remains as to the exact nature of the hernia, the cut is made in an upward direction.

In femoral hernia a cut outward would injure the femoral vessels, in an upward direction the epigastric artery and spermatic cord and round ligament in the female; in a downward direction the saphenous.

The incision of ring should be inward. In congenital hernia, the intestine descends in the pouch of peritoneum, accompanying the cord and testis into the tunica vaginalis and lies in contact with the testis and has no proper sac. Enough of the peritoneal sac, the lower part, must be left to furnish the testicle with a tunica vaginalis and is sutured with fine cat-gut over the testicle close to the cord, the upper part of the sac is disposed of in one or more of the usual ways.

In infantile hernia, the hernial sac and intestine descend into the scrotum behind the pouch of the peritoneum which accompanies the cord and testicle: the abdominal aperture of this pouch is closed, but the portion contained in the inguinal canal is open. In operating for infantile hernia three layers of peritoneum would require division:

the first and second layers being the layers of the tunica vaginalis; the third the interior layer of the hernial sac.

In direct inguinal hernia the hernial protrusion may escape from the abdomen on the outer side of the conjoined tendon and has the same coverings as the oblique inguinal hernia, or the direct hernia may be forced through the fibres of the conjoined tendon or the tendon is gradually distended in front of the hernia so as to form a complete investment for it.

Direct inguinal hernia is much less frequent than the oblique,—in the ratio of 1 to 5,—more often in men than women, on account of the large size of the external ring in men.

Direct hernia is smaller than the oblique in size, and globular in form, owing to the resistance formed by the transversalis and conjoined tendon, and its position being over the pubes and not in the course of the inguinal canal.

SYMPTOMS AND DIAGNOSIS.

An acute strangulation or intestinal obstruction may be manifested by shock, fainting, pulse rapid and feeble, skin cold and covered with a cold clammy perspiration, pupils dilated, shock due to compression of sympathetic nerves within the constriction. There is sudden tenderness and pain at the point affected, the hernial tumor or constriction, the swelling gets larger, harder, more tender and painful, especially on manipulation, nausea and vomiting, both aggravated by cathartics, paroxysmal pain, caused by violent peristalsis; the strangulated loop being impermeable to gas, tympanites soon begins and increases the abdominal pain; vomit at first is the contents of the stomach, later intestinal contents, later stercoraceous, especially if the obstruction is low down in the intestinal canal.

The physician should examine all the hernial regions for strangulated hernia,—if patient is fleshy and hernia small, it requires close examination to detect it, especially femoral hernia in obese women.

On palpitation the hernial swelling will be painful, tender and tense, no impulse on coughing; if distended with gas tympany will be elicited on percussion. If the swellings are large and coverings thin, manipulation may reveal the kind of contents; bowel or omentum, edema and redness of the skin over the sac indicate that gangrene has occurred, subcutaneous emphysema or general peritonitis is unmistakable evidence that the strangulation has resulted in gangrene.

The existence of a hard, tender hernial swelling in cases of acute intestinal obstruction is a reliable, if not infallible, indication that the obstruction has been caused by a strangulated hernia.

Differential diagnosis is between incarcerated hernia, inflamed hernia, cryptorchism, lymphadinitis, hermatocele of the tunica vaginalis and spinal abscess forming in the groin or hydrocele. Perforations of the intestinal loop, gas or feces in the sac, and ashy green color of the strangulated mass indicate gangrene. A gray greenish or brown color of the intestine also denotes gangrene. The strangulated bowel must be drawn down enough to expose the line of constriction; a limited *lema necrosis* may be found, and the rest of the bowel in a healthy condition and justify its return after the necrosed area has been repaired by a sufficient number of Lembert sutures.

The vitality of the bowel is tested by the presence or absence of peristalsis and the state of the circulation. If pinching of the bowel causes peristalsis it is a valuable sign of its vitality, touching the strangulated intestinal loop with a hot saline solution reduces the intense capillary and venous engorgement in a short time. A deep red is changed into a bright red, and a black into a deep red color.

Superficial needle punctures with or without hemorrhage will indicate whether or not the circulation has been arrested in the constricted loop. In complete vascular stasis there is little or no escape of the blood; if partial vascular stasis exists the hemorrhage will be abundant. Thrombosed mesenteric veins contraindicate the reduction of the intestine.

If the surgeon is in doubt about the safe return of the bowel into the cavity, and no positive evidence of gangrene be present, it is advisable to suture the mesentery to one tip of the wound, after emptying the loop of its contents and apply compresses wrung out of hot saline solution and examine the loop every few hours for evidences of a return of the circulation, and in such an event resort to secondary reduction of the hernia. If the circulation fail to return in four to six hours it is safe to assume gangrene has occurred. Then the case is treated accordingly if the omentum is free from adhesions and if normal, is returned.

If adherent to a large extent it is tied in small sections with fine silk and excised, and anchored to the abdominal wall above the ring,—otherwise the omentum retracts and

by forming adhesions with the intestinal coils may cause an intestinal obstruction.

The intestinal loop must be emptied of its contents before its return, thus demonstrating its permeability. If the intestinal loop is free from adhesions it is reduced at once, otherwise the adhesions are separated before reduction. If the gangrene is linear and limited the vascular condition of the loop satisfactory, burying the necrosed area with a row of Lembert sutures, and subsequent reduction of the bowel is the proper course to pursue, and no radical operation for cure should be done.

With a mesenteric suture, the intestinal loop should be anchored above the hernial ring and gauze drainage established so that in the event of a perforation occurring, the worst that could be expected would be a temporary intestinal fistula.

If the gangrene involve the entire loop, the following course is to be pursued: the intestinal loop must be drawn down until healthy bowel can be seen on both sides above the former point of constriction; in this position the loop is anchored by a mesenteric suture that also includes the ring, or some other solid structure, iodoform gauze is packed around the bowel above the seat of constriction, after which the gangrenous portion is freely incised and the parts thoroughly cleansed, then a hot moist antiseptic compress is applied. When the patient is in a better condition and able to undergo another operation the afferent and efferent limbs of loop are united by intestinal anastomosis.

In the hernial sac may be found other organs besides the strangulated bowel, omentum, mesentery, appendix or bladder. In an umbilical strangulated hernia the author saw the omentum, ascending colon, appendix and a portion of the ileum confined in the hernial sac.

DISCUSSION.

Dr. Irvin Abell, Louisville: The evolution of the principles of bacteriology has given us the opportunity to operate practically without danger in cases of simple hernia. The mortality is practically nil. In the inguinal variety of hernia the recurrences should not be more than one per cent., and in the umbilical and ventral types only slightly greater. Since this is possible and since we can promise our patients so much without exposing them to any very great danger, the employment of taxis should be rather limited. I think that the only thing which we need to agree on is, first, the proper application of taxis, and, second, its proper limitations and a comprehension of the dangers which go with its em-

ployment. Certainly there are greater dangers which the patient in ordinary health will undergo than when he is subjected to the operation for the radical cure of hernia.

In making taxis, be as gentle as possible. I grant that forcible taxis, even under an anaesthetic, has been successful. On the other hand, many complications have been produced by a rupture of the bowel during taxis, favoring the development of peritonitis and of local infection which necessitates the employment of drainage and interference with subsequent union are always to be thought of.

There are other things that may occur, and you will meet them, so that it is impossible to tell the condition of the bowel without looking at it.

The doctor explained the method of strangulation and its occurrence. Abrasion causes oedema and by pressure there is a complete shutting off of the circulation. It is impossible to tell, without opening the sac, to what extent this abrasion has gone, absolutely impossible. The symptoms are no indication, so far as their severity are concerned, of the amount of gut involved. In fact, until the gut has been destroyed you will find the patient to have a normal temperature and pulse, even when the gut has become gangrenous. In the application of taxis you can readily see the dangers to which you expose your patient.

Another point to be thought of in that connection, one which does not occur frequently, is the occurrence of late stenosis. You will find at the point of strangulation a marked infiltration in the bowel wall, so that when it is converted into permanent tissue there is a marked contraction and narrowing of the lumen of the intestine and subsequently a complete stenosis.

Therefore when we can promise our patients so much from operation, and realizing the dangers of taxis, we ought not to employ taxis unless there are distinct conditions that render the operation particularly hazardous. These are, necessarily, the extremes of age and the general condition of the patient.

As to the complications that result from letting a hernia go too long. We found that they interfere not only with the patient's recovery, inasmuch as the putting off of any operation seriously militates against getting good results afterward. You should attempt, first, to save the patient's life, and, second, to cure him of his trouble; a permanent cure. Unless you attempt to do the operation early, the second part is absolutely impossible because you will have complications to reckon with, such as local infection, local peritonitis, inflammation or gangrene, that will necessitate the employment of measures that will mean leaving the wound open;

consequently if the patient does get well he will have to go through a second operation for the relief of the recurrence.

In regard to matters of cleanliness. We should do the operation before the patient has had time to get the field of operation contaminated. The surgeon must be clean, and every man who is doing that kind of work will be clean. That is the only way to avoid complications which conduce to the return of the hernia.

Dr. Louis Frank, Louisville: If the doctor's theory of predestination of physicians and surgeons is true we should abolish all the medical colleges, because there is according to his theory no occasion for them. We can get along just as well without them. I am sorry to see that the doctor has been so unloyal to Kentucky as to ridicule our city hospitals by stating that they are dirty and that the internes and nurses in them are also dirty. I do not know where he has been to see work, but if he will come to Louisville we will show him clean hospitals, clean internes and clean nurses. I also fear that if the physician and surgeon strain the ear so much listening to the jingle of gold, that the patient, through his predestination, may suffer much in consequence.

I realize the fact that there are many fine surgeons in the rural districts and that there are times when operations, under certain conditions, can be done as well in the country as in a well-regulated hospital in the city, but this can be no reason for getting up before an intelligent audience such as this and saying that surgery can always be done as thoroughly in the country, giving the patient the same chances, without the necessary appliances for obtaining cleanliness, as well as it can be in a hospital where such things can be obtained and are used as a matter of routine every day. It is folly to make such statements.

I say that with all due regard to the surgery that must be done to save the life of the patient, and realizing the fact that good surgery can be and is done in the country, but the best surgery, giving the patient the best chance, can only be done under proper conditions such as pertain in a well-regulated and prepared hospital. If Dr. Carpenter or any other man here will take his patients into the best surroundings, he will obtain the best results.

As to the treatment of strangulated hernia. I would go even a step farther than Dr. Abell, and possibly a step farther than Dr. Carpenter, and I hope that I will not be considered too radical in what I say. I believe that a strangulated hernia should be classed in the same category as a suppurating or a perforated appendix. I do not believe that there is any time in the treatment of a strangulated hernia, when it is possible to do an operation, that taxis should

at all be considered as a method and as a form of treatment. I believe that in strangulated hernia we will get better results and we will save more patients if we will operate at once without attempting taxis. Dr. Abell brought this out very nicely and he called your attention to the dangers that attend the performance of taxis. Immediate operation will save many more patients than when you resort to taxis and operate only on patients where the hernia can not be reduced after fifteen or twenty minutes, no matter how careful your manipulation may be. I have opened abdomens in cases where the hernia had been reduced en masse, death resulting, when I am sure the patient could have been saved by an immediate operation. These are some of the dangers that were well brought out by Dr. Abell. Better advise your patient to be operated on immediately. You must, to cure him, operate on him later anyway, and by doing it early when active symptoms of trouble are present you save him from the dangers not only of a late operation, but from those mentioned as often incident to the reduction and that damage that may be done by incomplete or improper or any kind of a strangulated damaged bowel.

Dr. G. A. Hendon, Louisville: It is not always the easiest thing in the world to recognize a strangulated hernia. I once had the misfortune of operating on a patient who had been under the care of a very competent practitioner for five days and at the operation found that the patient presented the well-known, but rare form of hernia known as Richter's hernia. There was only a small knuckle of the gut presenting in the inguinal canal, still it was sufficient to entirely shut off the fecal circulation and produce a strangulation of the bowel as the result of which the patient died.

That is one point that should be born in mind in considering the subject of hernia.

Dr. Carpenter, closing the discussion: I admire the Louisville colleges and the profession of the State of Kentucky, but we are in a life-saving service. We must take out the life boat, throw out the life line and if I have succeeded in saving one patient's life by having written this paper it will be a success and I shall feel that I have been well repaid for writing it. I am anxious to save life. We all should be anxious to save life, and I believe that it can be saved as well by the country doctor as by the doctor in the cities and by the professor in the medical schools.

LA GRIPPE.*

By J. TOM PRICE, A. B. M. D., HARRODSBURG.

Grippe is the new synonym for the old-

*Read before the Mercer County Medical Society, February, 1906.

fashioned word influenza, the history of which can be traced as far back as the 15th century. In none of the text-books, either American or foreign, have I been able to find the disease indexed as gripe, but always as influenza. La gripe, a name of French origin and derivation, first appeared in medical literature about eighteen years ago. Prior to the great pandemic of 1889-90, that so rapidly spread over the Eastern and Western Continents, and almost "unto the uttermost parts of the earth," the disease now commonly called gripe was universally known and described as influenza. Dr. Daniel E. Hughes of Philadelphia gives a "shot-gun" definition as follows: "An acute, specific, infectious fever, moderately contagious; sporadic, epidemic, and pandemic; associated with catarrhal inflammation of the respiratory tract, sometimes of the digestive, always accompanied with disturbances of the nervous system and a debility out of all proportion to the intensity of the fever and the catarrhal process, and apt to be attended with serious complications and sequelae." A specific poison, a non-motile, rod-like micro-organism isolated from the naso-pharyngeal and bronchial secretions in 1892 by Pfeiffer, and found in the blood the same year by Canon, is the recognized cause. The soil, climate, season, and atmospheric changes are not regarded as marked, if at all, etiological factors. Outbreaks occur in all climes and at all seasons of the year, but are usually wide-spread and more severe in the winter season. The symptomatology is variable; the manifestations are those of degree of intensity from a simple coryza to the severest attack with all the classic symptoms of a fatal gripe. There are four well marked, distinctive types, the bronchial or respiratory, the nervous, the gastro-intestinal, and the febrile forms. It is not the intention of the essayist to enter into the detailed symptoms, familiar to all, of these various forms, but to collate some of the observations and reports of this most treacherous disease. The complications, sequelae, and peculiarities seem most to concern and demand the attention of the profession. The mortality rate is extremely low, according to Pepper, "less than one-half of one per cent." This fact alone is apt to cause the physician, sometimes in mild cases, to lightly regard, as the laity always do, the disease, forgetting that it is both contagious and infectious even in the mildest form. Pneumonia is the most frequent and usually fatal complication. This disease ordinarily begins as a lobular or catarrhal pneumonia, and by extension and fusion of the diseased areas becomes lobar or croupous in character. Michel calls attention

to a "hemoptic congestion" in pulmonary complications that might be mistaken for tuberculosis, also to the "bronchoplegia with signs of cavity" in which it is thought the stagnation of secretion in the dilated bronchi is due to the paralysis of the bronchial muscles and may be mistaken for the formation of an abscess or tuberculous cavity.

Peucker reports a case of pneumonia in a baby five months old with slowing of pulse, strabismus, inequality of the pupils, spreading of the sutures, bulging of the large fontanelle and icterus. The autopsy showed pleuro-pneumonia, diffuse meningitis with serous and purulent exudate, and double otitis media. The Pfeiffer-Canon bacilli were found in abundance. A bacteriological examination of nine cases by Castellani showed the grippal bacilli associated with numerous pneumococci in the pus from the ears and expectoration. Otitis media of whatever form should be carefully watched. The hemorrhagic type is supposed to be characteristic of epidemic gripe. The onset is usually between the third and seventh day with hemorrhagic effusion into the tympanum, manifested by intense pain. Spontaneous perforation usually takes place in about twelve hours. The grippal bacillus is thought to have a peculiar and unfavorable effect on the bony structures of the ear, often converting apparently very simple cases of suppurative otitis into very malignant ones, with rapid destruction of bone, and this without marked symptoms. This tendency to rapid bone destruction can be prevented, it is said, only by early and, if necessary, repeated paracentesis. W. H. Smith asserts that the pneumonia due to the grippal bacillus appears in multiple foci often widely separated. It may be bronchobulbar or, by fusion of the lobes, may simulate lobar pneumonia. The foci may lie directly under the pleura and form abscesses which break into the pleural cavity thus causing pneumothorax. Pleurisy, bronchitis and edema of the lungs, especially in the aged and debilitated, are also frequent and distressing, sometimes fatal, complications and sequels rendering and preparing a field most susceptible to tuberculosis, particularly in those of a phthisical diathesis. Gripe seems to have a peculiar fondness and ferret-like predilection for nerve tissue. The manifestations of the nervous type appear in many forms, as neuralgia, a simple neuritis or polyneuritis, a mere transient paresis or a grave monoplegia or hemiplegia, of more or less, protracted duration, encephalitis, cerebral abscess, cerebro-spinal meningitis, a slight depression of spirits or a well marked dementia. The most serious is cerebro-spinal

meningitis. A. Foster describes two forms in the following language, (1) "That in which there is a simple benign lesion, seldom fatal, and due to the special action of the toxins secreted by the influenzal microbes, producing inhibition phenomena, toxins which appear to have a predilection for nerve-centers and for which the cerebro-spinal fluid serves as a receptacle. Althaus in a series of postmortem examinations has also noted this predilection for the nerve-centers, having found intense hyperaemia in the pia mater and brain, particularly at the base of the brain. (2) That in which the lesion is more severe, generally fatal, and in which the streptococcus or staphylococcus or other bacilli play an important part."

Cases of this kind have also been described by Bristowe, Nicholson, and Judson Bury. A. Ghon reports a case of grippe complicated by meningitis which he thought was due to the extension of infection from suppuration in the antrum of Highmore and the frontal sinus to the meninges. Bacteriological examination showed diplococci and the grippal bacilli in the pus. Complications of the peripheral nervous system are the most common, and among these the neuralgias take first rank. Trigeminal neuralgia is the most frequent. Grippe may reawaken neuroses from which the patient has long been free, exaggerate existing or even induce neuroses in persons who have never been affected. Diemer reports a case which showed at the autopsy a parenchymatous neuritis the degenerative lesions being most marked at the peripheral nerve-ends. "The cylinder-axis and myelin have vanished from the neurilemma by osmosis, leaving the latter empty in many places, demonstrating the influence of some toxin." Polyneuritis usually commences during convalescence, ten to thirty days after the first symptoms of grippe. Paralysis may occur in any of the muscles but usually in the arms or legs, and is more pronounced on one side. Five of the ten cases reported by Diemer had double peripheral facial paralysis, one paralysis of the diaphragm that terminated fatally in two months, the others had oculomotor or optic nerve paralysis. The sensory disturbances were not pronounced, although cutaneous hyperesthesia existed. Trophic and vasomotor disturbances are not severe; muscles may slightly atrophy, and some eschars, zona, and hypertrophy of the mammae have been observed. Cutaneous reflexes are abolished or feeble; tendon reflexes completely abolished, or the latter may be normal in the arms and abolished in the legs or vice versa. Reiger reports as follows a curious swelling of the face and head with neuralgic

pains, itching and vesiculation in the case of himself and two others. The swelling of the scalp was marked without redness, skin was pallid and showed swelling of the veins. Frequent eruptions of new lesions took place, the swelling in each region lasting only twenty-four hours. The skin over the lower jaw was not involved, that on the nose and cheek finally became a dark-red color. Beneath the skin a fluid exudate presented. The swelling was symmetrical, bilateral, and extended to both sides from the median line, and was marked over the bony prominences and noted but little over the muscular portions of the face. Fever was present during the eruption which continued for four or five days.

The baneful effects of grippe in pregnancy is shown in the following report of Dr. Rudolph Muller. In twenty-one cases of pregnancy, seventeen aborted; grippe being the primary cause that induced a hemorrhagic form of endometritis with such fatal result. The peculiar effect of grippe is also manifested in the following: "in a school, chlorotic and anemic girls in whom menstruation was irregular, the flow became and continued regular after an attack of grippe."

A very peculiar sequel, one isolated and alone, the like of which I could not find in all the voluminous literature on this subject, was observed in a man aged 40 years, a tailor, alcoholic and neurotic, by J. J. Pringle, whom I quote verbatim, "In February, 1895, he had a typical severe attack of influenza and was in bed a month with it. He does not think he had any rash. In the beginning of March his hands and feet began to peel and his nails to become dry and brittle. He came under observation on March 21st, when the following note was made: "Over both hands the epidermis is peeling off in large sheets, especially from the fingers, leaving the subjacent skin healthy. There is hypertrophy of the nail-bed of all the fingers, and especially of the thumbs, where the piling up of the epidermis is so great as to threaten the vitality of the nail. There is a similar desquamation of the soles and similar changes in the toenails but less marked. The man is in a marked condition of post-influenzal neurasthenia. Subsequently all his nails fell off, and were replaced by new nails with prominent transverse ridges. His nervous prostration persisted; he complained of persistent paralytic feeling in the fingers, and disordered sensation. Finally he became profoundly melancholic, but improved greatly at a convalescent home at the sea side. He had another attack of influenza in October, 1895, followed

by similar changes and total loss of nails, and again in February, 1896. Recently he had a fresh attack, called "bronchitis," and he returned to the hospital on November 4th, with desquamation of all the fingers, although more marked in some than in others. There is, on examination, no anasthesia, but some loss of tactile sensibility." Special attention is called to a grippal angina resembling true angina pectoris accompanied by the same symptoms with varying sensations lasting for sometime.

The variability of the many cardiac sequels depends on whether the vagi, the sympathetic, or intracardiac ganglia are effected. or it may be of bulbar origin.

F. Foreheimer gives particular stress to the importance of cardiac manifestations in his paper on "Acute Dilatation of the Heart in Children during the Course of Influenza." Convalescence is slow in all such complications or sequelae; active physical exertion can not be without shortness of breath, palpitation, and a sense of weariness for months, and in some for years, after the original attack of grippe. Albuminuria may be frequently seen in grippe, but nephritis due to this cause seems very rare. Freeman has found in the literature only seventeen cases, all in children and young adults with one exception only, an adult 65 years old. Five cases occurred in children under twelve years of age, the youngest being three years old. The nephritis in the majority of the cases was the acute hemorrhagic form. Pfeiffer claims a thick, yellowish green, coin-like balls of sputum, as a peculiar, grippal characteristic; others a mucopurulent or a very bloody sputum, or a sputum of pure blood like that of pulmonary infarct. The great abundance of sputum is also considered a marked characteristic. B. W. Sippy of Chicago claims that "the sputum may separate in the cup into three layers; an upper gray layer, containing air, a middle layer of fluid consistency, and a thin bottom layer of glairy mucus or of broken-up muco-purulent sediment." Franke declares he has never seen a case of *la grippe* that did not within the first few days present a typical red stripe on the anterior pillars of the soft palate, particularly marked in chronic or recurrent cases. It is a dark red or bluish red, and looks like a rainbow arching with the palate, but interrupted in the center by the uvula which is never involved. His second sign is a swelling of the papillae of the front of the tongue, sometimes confined to the lower surface. His third sign is enlargement of the spleen, usually observed in the chronic stages. L. Kolipinski observed upon the mucous membrane

of the soft palate small, convex, pearly-white or transparent projections the size of a grain of sand. They may be few in number or abundantly scattered over the whole surface. John Terry notes a peculiar condition of the tongue in grippe; the appearance of dark, purplish-red spots scattered over the anterior half of the dorsum about the size of a pinhead, becoming white and vesicular later on. The same eruption has been observed and similarly described by other writers. W. Stekel found in the mouth, upon the gums, in the pharynx, and in the nares, small yellowish-white spots from the size of a pinhead to that of a split pea raised above the surrounding mucous membrane which was not inflamed. They could not be rubbed off, but consisted of an infiltration of the epithelium. Excision and microscopic examination of these spots showed a structure similar to that of a diphtheritic or other croupous membrane. These are some of the peculiar aspects and typical diagnostic signs noted in epidemic grippe, but may be observed in endemic or sporadic cases. There is no specific drug or serum treatment. Quinine seems to be a universal and much lauded remedy; regarded by some writers as a specific. In the ordinary, uncomplicated cases with the characteristic backache, headache, myalgic pains, little or no fever, and a slight catarrhal affection of the respiratory tract, the initial dose of calomel at bed-time followed, if necessary, by a saline the next morning, quinine, ammonia muriate, Dover's powder, and in some instances salol, in small, often repeated doses have been very effective in my experience. Various writers seem to have some special drug-hobby, yet no general rule of treatment can be given. The disease seems to be treacherous and uncertain, as to the probable complications and sequelae, therefore each case is a special study per se. With rest in bed, thorough disinfection or destruction by fire of the sputum and secretions, and a scrupulous vigilance as to all the organs and their functions, the treatment resolves itself into one of a symptomatic, supportive, dietetic, and prophylactic character.

THE DOCTOR'S AUTOMOBILE

BY JAMES B. BULLITT, LOUISVILLE, KY.

(Temporarily at Berkley, Cal.)

During the past two or three years an increasingly large number of physicians have been hopefully considering the automobile, as the probable successor of the time-honored bob-tailed white horse. These are the things they want to know: is it feasible, practical and economical? Five years' experience with

the mechanical horse has borne the writer some fruit, in the way of an opinion at least, and I desire to give that opinion for what it may be worth.

My experience began with a small second-hand runabout, the machine having had the honor of being the first one brought to Kentucky. This honor was of more moment to the machine than it was of value to me, who became its unfortunate possessor after the "bloom" had all been worn off.

For the rapid accumulation of experience let me commend the second-hand machine! For such use it is a perfect success.

After a few months the owner has had experience of all the possible calamities which can befall the automobile all the way from a ruptured tire to a worn-out cylinder. He becomes inured to hardships, and when a new calamity befalls he comes to regard it with neither rage nor despair, but rather with a mild degree of interest, and some wonder that any new calamity could have occurred, having been already convinced that all that were possible had already befallen. And when the "old saw" (that was the name my affection prompted me to give it) went out and came back again without an accident, the whole family assembled to rejoice over the event. Frequent dissection of the "old saw" made me quite familiar with her anatomy; and I became so skillful at diagnosis of her troubles and so deft at repairs that I could frequently straighten things out myself even in the dark without a light. But when something serious happened and she had to be sent to the shop, then was where my real troubles began. For stupidity and expense the ordinary automobile repair shop of the past few years is easily entitled to the blue ribbon and the front seat in the pit of perdition, where the maimed and bleeding owner generally wished them. Moral: Keep your car out of the shop if you desire success and happiness.

My second venture was a new runabout, and with it and also with my third car I had very good success. The cars have kept going and have given a tremendous amount of service. I have concluded that on gravel roads, one automobile gives much more service than one horse probably as much as two horses. It will be noted, however, that this is on *good, hard roads*. He who attempts to operate an automobile for business over soft dirt roads during the rainy season will only meet with bitter disappointment. The hard road is the *sine qua non* for the agreeable and profitable use of the automobile, and if this first requisite is not to be commanded, then all thought of employing the automobile

should be abandoned. If the physician must keep horses for other reasons anyway, or if he can with economy hire his horse from a livery stable during the rainy months of winter, or occasionally after rains in summer while the soft roads are drying up, then the motor car might be used even under circumstances of soft roads with satisfaction. But let no one be deceived into believing for an instant that the automobile is a cheap proposition. Such a belief at the outset will lead eventually to bitter disappointment. In the writer's experience and in the experience of practically all of his acquaintances, the automobile costs much more, mile for mile of distance covered, than the horse, probably twice as much. In such a computation there must be considered the first cost of investment, the cost of "feed" (lubricating oil and gasoline), the cost of repairs, and finally the deterioration in value with use. All these things considered, I believe that most users of runabouts will find the expense of up-keep about equal to the cost a new horse every year. I have heard of some few enthusiasts who have reported very small repair bills for the first year. Further experience over a longer time has doubtless convinced them that rubber and metal will wear out with use, and if, after the first year's use, they escape the replacement of tires and worn metal parts at a cost at least equal to that of a good horse, they are luckier than most automobile owners.

At the end of a year or two there is always the temptation to sell the machine and get the latest model with all up-to-date improvements. This is perhaps good practice. If the machine is kept longer it rapidly becomes a relic of the past, in looks and to some extent in performance, and enters on a sliding scale of value price for age. To be sure several hundred dollars will have to be sacrificed in making the trade for a new machine. But an equal amount will probably soon have to be sacrificed in repairing the old one and much greater satisfaction will be had by becoming the possessor again of a brand new car.

Some four or five years ago many of my friends remarked that they would like to have an automobile, but considered the price too high. They thought the price would surely come down in a year or two, and they would wait. Their own opinion was that there was a lot of fun to be had while the price was coming down. Despite the tremendous increase in the number of automobile factories, prices have not come down, but have rather gone up. The tendency has all the time been to give more for the money,

rather than to give the same for less money. Further than this, many manufacturers who formerly built small runabouts, are now devoting themselves to the manufacture solely of large cars, and they are certainly behind in their orders for these. There is one single exception in the case of a small four cylinder runabout which was put on the market with a great flourish at \$500.00. Whether it will continue at this price, and make itself worth the money remains to be seen.

There is much service and some sport to be had out of the automobile, and every doctor who enjoys good roads and a good income should have one. But let no one be deceived into believing they are economical, for no matter what isolated experience may be over a short period of time, in the long run they prove themselves expensive luxuries.

THE TREATMENT OF PLACENTA PRAEVIA.*

By F. M. BEARD, SHELBYVILLE.

Placenta Praevia is divided into Placenta Praevia Centralis and Maginalis. These two divisions will cover all the cases that come under the care of the Accoucheur. If the Placenta is attached completely over the internal Os Uteri,—we have the Centralis; if attached to the margin we have Marginalis. The proper treatment of these two conditions is entirely different, and the quicker we diagnose between these two forms, either one of which is a very dangerous obstetrical complication, the better it is for mother, child and the accoucheur. The centralis is the graver and requires the most delicate skill to pilot even the mother over this tempestuous obstetrical storm, for veritably at times we are at sea and most of us are sailing over strange and unknown waters. The placenta does not commence to form before the second month of uterine gestation and does not develop into an obstetrical entity much before the fourth month, and even at the beginning of fifth or sixth month it may not in an abnormal position give us any warning of its unnatural location.

In the proper treatment of the Centralis form the first indication is the diagnosis, and of this we should be very positive for that is the clue to the treatment. I believe if we have a case of central implantation, and it has progressed to the seventh month we should then and there terminate the labor by Caesarean section, for we want to save both mother and

child. We have heard a great deal about the two schools of obstetrics, namely, the French and the English, I would not adhere to either. We have now an American school, or rather a Kentucky school, which is to save everybody if we can and murder nobody.

Tyler Smith said nearly six years ago, "May we not hope for continual improvement in obstetrics, until the lives of both mother and child are guarded to the utmost possible extent. The more the obstetric art and general medicine is improved the more hope shall we have of approaching the time when the lives of the mother and child shall never come into collision, when the painful thought of sacrificing or risking the one for the safety of the other shall never arise to the accoucheur."

I believe this obstetrical millenium has dawned upon us, and to-day we do not draw straws to decide whether we let the mother or babe live; but both being made after the image of their Creator, one with all its life before it, the other with at least one-half her life before her, and I dare say the better half, for usually the complication arises in multiparous women, both should be saved alike.

There can not be as much danger, either to mother or child, in the Caesarean Section in proper hands and in a suitable place as there is in delay and procrastination. We sit quietly by and see the life blood ebb away I say all our efforts should be exerted always as peacefully and placidly as the evening ocean tide after a tempestuous storm. Hence to save and never to destroy.

If we are called in too late, or the circumstances over which we have no earthly control, contra-indicate Caesarean section beyond a doubt I would attempt rapid podalic version, because I think high forceps operation is out of the question. If we have a dead foetus craniotomy is indicated, otherwise the operation should never be done.

The other forms of the treatment of Placenta Praevia Centralis, detachment and delivery of the Placenta, Puncture of the membranes, tamponing the vagina and waiting, high forceps delivery, are all not to be relied upon, and will if we pin our faith in them bring us to sorrow and dreadful results. I certainly would condemn in unmeasurable terms the old practice of Simpson in the entire separation of the Placenta and its immediate delivery, unless in the case of a dead foetus.

Placenta Praevia Marginalis is entirely a different obstetrical picture. While it is dangerous and always calls for alarm there are the natural elements of delivery that may

* Read before the Kentucky Midland Medical Society, Lexington, Ky., January, 1907.

come to our rescue. This complication may not be known until labor has actually commenced, and nature may take care of both mother and babe and do it in a very scientific manner. This is not an absolute certainty, but only occurs in those quick labors that do not constitute rules, but exceptions. Some of these cases may go on to full term, and when they do we have a better chance to deliver in the normal way. This is especially true with those cases where the placenta is attached far back from the internal Os, but on its margin, and the hemorrhage does not come on until there is partial, or almost complete, dilation, and then with a quick first stage of labor and the head, pressing low down around the cervix acts as a plug controlling hemorrhage delivery is accomplished by natural means. If there is slight hemorrhage before the seventh month, I would recommend vaginal tampons, a rest in bed, opiates to quiet uterine contractions, nerve sedatives to allay any irritation, and lastly constant attention upon the patient and if possible in an institution with every preparation ready for interference if the occasion demands.

The hemorrhage is the guide, and if this has been very excessive it will produce premature labor, but it may be too late and should not be relied upon to terminate the case. I believe under no circumstances should we produce an abortion. After the seventh month we are perfectly justified in producing premature labor, if the case is alarming and it is better both for mother and child.

If the Os is sufficiently dilated and the hemorrhage great, Podalic Version is the best means for a successful termination. If the head is presenting, and well down in the pelvic cavity, we may attempt forceps delivery, but I do not believe this as safe as Podalic Version. I know there is some shock in this operation and I think its merits are best realized by its early application. Delay means death, and may be, two deaths. Of course we take the chance that is usually given in the breech presentation in labor for the child that is better than temporizing.

If labor has not commenced, and the hemorrhage is very great, Champetier de Ribes balloon, or manual dilatation, is indicated and then the rapid delivery as above. Puncture of the membrane, as recommended by Barnes, I do not consider of any value as he says that this may excite uterine contraction, but I would rather trust to the gathered waters, if they are there, to excite uterine contraction than

to puncture the membrane to accomplish this desired end. If there is no Amniotic fluid it amounts to naught either way, and I think this very much endangers the chances of the child.

Case I. Mrs. A., mother of nine children, age 40, all confinements normal except the seventh, which was a dry labor, with forceps delivery and dead foetus.

Present labor began at 4 o'clock a. m. November 24, 1900, just two years after her last confinement. Upon first examination I found the Os slightly dilated and pains infrequent. After having been in labor for seven hours, and the pains now being fifteen minutes apart she called my attention to the fact during a pain there was considerable hemorrhage and I made an examination and found the Os almost completely dilated and waited for a pain which came on with a large stream of blood flowing from the uterus, and at every pain thereafter there was considerable hemorrhage and I determined to interfere at once. I found upon further examination a partially detached placenta, the hemorrhage ceased after the pain was over and I immediately called a consultation, W. F. Beard, responded and gave the chloroform while I performed Podalic Version. Delivery was accomplished by this means with some difficulty. The woman was very small and the baby weighed twelve pounds. I had very little trouble with the after coming head, but the child was asphyxiated and in spite of artificial respiration which was carried on for half an hour the baby remained so. The mother after delivery of the placenta developed post-partum hemorrhage, which was terrific and it seemed she would be exsanguinated in a few moments, it was controlled with some difficulty, and she made a complete recovery.

Case II. Mrs. B. age 24, primipara, health good, family history good, mother before her had normal confinements. First had a hemorrhage in August, continuing at intervals, was attended then by Dr. Dunlap of Danville who made a diagnosis of Placenta Previa. She came to Shelbyville on the 13th. of September, 1905, and was seen that night by W. F. Beard, who found upon examination a Marginal Placenta confirming the previous diagnosis, but also in addition a probable twin pregnancy with occiput presentations. Under the influence of morphia, hypodermically, after having taken out the tampon the patient was quieted and the hemorrhage ceased. But the next day there was slight hemorrhage and September 17 labor

began. The pains continued during the morning, and there was no hemorrhage, for the head pressed low down on the os uteri. The first stage lasted for three or four hours, and then the second stage which was very long and tedious was, terminated by forceps delivery with little difficulty.

The second child also came along with an occiput presentation in a few moments and was expelled by the mother without any assistance. They were between six and seven months, both males and both occiput presentations. Upon the completion of the third stage which was accomplished without any difficulty, there being separate placentas, I found upon examining them the one for the first child showed recent detachment. The placenta for the second child showed a good deal of old clotted blood where the detachment had taken place some time before and the second baby was very much smaller and weaker, and lived three days, but the first born is a healthy baby to-day and survived an attack of spinal meningitis when about six months old. This I consider a very unique obstetrical case, for I found upon examination a double placenta previa marginalis with both the os uteri, and twins of the same sex, and both occiput presentation in a primipara.

AN UNUSUAL OBSTETRICAL CASE.*

BY PAUL BEAUCHAMP, M. D.

Mrs. M., age 26, very short and extremely fleshy. One labor which was long and difficult, the child still born. On examination the membranes were ruptured, the pains hard and frequent. The posterior part of the thorax was presenting, the left elbow was in the vagina, the right hand at the cervix.

A diagnosis of left acromio-iliac presentation was made. Fetal movements were felt by the patient the day previous to the onset of labor. The fetal heart was not heard. Dr. Gunn, the elbow was replaced and version by external manipulation was tried; after repeated failure the Braxton Hicks method was tried with as little success. Podalic version was attempted, but with the hand well in the uterus cavity, after complete exploration we were unable to find the lower extremities. A round boggy mass with a head, neck, thorax and abdomen was all the anatomy we could identify. This soft boggy mass completely obscured and enveloped the breech. Embryotomy was decided upon after the failure of all other methods.

With two pairs of volsellum forceps, tow-

els and a strong flat tape the operation was begun. The arms were first removed by traction on the towel and the tape clove-hitched around the arm. The thorax and abdomen were punctured and contents were removed.

Sephalic version was attempted with no results. Using my finger as a blunt hook traction was made in the flank and the breech was delivered with two good-sized feet.

By repeated application of forceps, and traction on the neck, the head was delivered which was hydrocephalic; the occipito mental diameter was 12 inches.

The head, which was nothing but a water-bag had in its flexed position completely overlapped the buttocks and lower extremities.

A uterine douche of carbolic acid was given, followed the next day by the forbidden bichloride of mercury solution. Our work was done with considerable lack of the astute text book recognition of the foetal parts and with out any of the instruments thought to be indispensable in this method of delivery.

The woman made an uneventful recovery, escaping many cuts, tears, bruises and perhaps sepsis by our not bringing elaborate equipment.

INTESTINAL CANCER.*

BY DAVID BARROW, M. D., LEXINGTON.

I wish to discuss with you to-night, and it must be in a very general way, Intestinal Cancer. This disease has caused me more anxiety, has caused me to vascillate, has made me procrastinate, and commit more unremedial errors than any class of cases that have come to me for treatment. Unfortunately, but little is known about cancer, notwithstanding the earnest work that is being done in many places by men high in the medical profession. The cause we are in ignorance of, the various opinions are but theories, and facts have we but few. As to the treatment, there can be no difference, as there is but one. The cancerous tumor must be gotten rid of, either by knife or cautery. All remedies so far suggested have been disappointing, even the X-Ray treatment, at one time so lauded, has in the main proven a failure. Trypsin, the latest, I predict, will go the way of the others, and will soon be forgotten. That the disease is increasing, the statistics of various countries show. In a recent article by Lathrop Smith of England, he predicts that not far in the future, as many deaths will occur from cancer as from tuberculosis, and cites quite an array of sta-

*Read before the Logan County Medical Society.

*Read before the Fayette County Medical Society.

tistics to sustain the opinion. In this distressing picture, there is something to encourage us, a beacon of hope to lead us on. The little knowledge we have can be utilized, and if promptly acted upon, many cases may be saved.

It is a fact that cancer in the beginning is a local disease, and is curable. Only after a variable time, often a long time, does it become constitutional. It is also a fact that a radical operation done early, while the disease is still local, will cure the patient, and the cure will be permanent. After metastases occur, after it becomes impossible to remove the entire growth, an operation can only palliate, but little or nothing can be accomplished.

The success in the future will depend upon early recognition of the disease, prompt and radical operation. In superficial cancer this is usually easy to do, but not so in internal cancer. The early diagnosis of intestinal cancer is always difficult, often impossible. If we wait for positive diagnosis, in the great majority of cases, the opportunity for cure is lost, the case is inoperable, and has to be closed without accomplishing anything, or some procedure is instituted to relieve the obstruction with the hope of adding to the patient's comfort. Is there any way of getting these patients to the surgeon earlier? Sometimes there is not, but often there is. The general practitioner is the one responsible, with him must rest largely the fate of the patient. He must know the sin of waiting too long is just as great as acting too quickly. The sin of omission is as great as that of commission. He must have counsel early in any abdominal case with obscure symptoms. Should he wait for total obstruction or for a palpable tumor, all the surgeons in Christendom would probably be of no avail. We must not let the age of the patient throw us off guard. De Nanerade says, "Common error is to fail to recognize that malignant disease of the bowel does occur with sufficient frequency in the young to demand careful consideration when the clinical symptoms and signs point in this direction."

The majority of cases of intestinal cancer will have suspicious symptoms long before a diagnosis can be made, and they will be detected, if we are watchful. An increasing constipation, slight tympanites, an occasional mild colic, intestinal indigestion, change in the stools, are conditions that should demand investigation. None of us have the right to treat such evidence lightly, and soothe the conscience by giving a prescription for digestive tablets, or some so-called intestinal antiseptics. Place these pa-

tients on the examining table, inspect and palpate the abdomen carefully and systematically, auscultate, note carefully any tenderness or muscular guard. Then when in doubt, the stomach specialist may give us valuable information, and should be consulted in these suspicious cases when practicable. He may exclude gastric ulcer by examining the stomach contents. He may detect or exclude that troublesome disease, mucoid colitis by careful examination of the feces. Rarely, blood examination will give some information, usually negative, by the exclusion of inflammatory disease, and so may urinalysis, by the detection of an excessive amount of indican, etc., be relied upon to aid us in making a diagnosis.

Kelling of Dresden, states, that the corpuscles of certain vertebrates are more readily dissolved by the blood of cancerous patients than by blood of non-cancerous. The family history must be investigated, no matter what our idea of inheritance may be. So must the patient's former illnesses. The history of an old dysentery, in a patient suffering with rectal irritation, should demand an investigation of the rectum, sigmoid and descending colon. A typhoid ulceration may be the starting point of a malignant neoplasm, so a history of an attack of typhoid fever will influence us in forming an opinion. Progressive though slight loss of weight should be looked into, and if accompanied by abdominal symptoms should cause suspicion, and demand close observation until the case is determined. My own experience is limited to less than a dozen operative cases and to more than a dozen where operation was refused, the disease having advanced beyond any possible hope of relief. In only three of the operative cases, could I do radical work, the rest were simply explorations, where nothing was done or something done to relieve or palliate some urgent symptom. The three cases subjected to resection are as follows:

Case 1,—Mr. L. C. 27 years old. Had suffered with intestinal symptoms for more than a year, and twice had had obstruction lasting two or three days. His pain had been great, and he had acquired the morphine habit. When he consulted me there was evidence of serious illness, and I detected a mass to the left of and below the umbilicus. At the operation I found the cancer, larger than an egg, in the descending colon, and almost closing its lumen. A resection was done, and the anastomosis made with a large Murphy button. A week later I had to re-open the incision and remove the button as there was recurrence of obstruction. This was fol-

lowed by a fecal fistula which closed in about a month. The patient left the hospital and went to his home where he improved greatly, and was comparatively comfortable for nearly a year. There was then evidence of return, the mass increasing rapidly. A year and a half after the first operation, he had to return to the hospital, and to relieve the obstruction, which was almost complete, I made an artificial anus. This made him more comfortable, but he died in a few weeks later. The pathological report—intestinal carcinoma.

Case 2,—D. T. Age 62. Had suffered from abdominal colics for a number of years, but for the past year the colics had become more frequent, and he had great trouble to get his bowels to act. The patient was rather fleshy, and his appearance indicated health. Nothing could be detected by palpation, or in any other way, all evidence of disease being subjective. Dr. Kinnaird saw this patient, and after a few days observation at the hospital, we, believing that he had some form of intestinal obstruction, advised an exploration. A mass as large as an orange was found involving the cecum, and almost closing it; the ileum was greatly dilated, and its wall quite thick, it being fully as large as the colon. About eight inches, including the cecum and several inches of the ileum, were removed, and with a Murphy button the ileum was anastomosed to the ascending colon. Convalescence was rather stormy, but the patient left the hospital in about six weeks. The Murphy button lodged in the rectum, and was removed by Dr. Kinnaird four weeks after the operation. It was four years last October since this patient was operated upon, and he continues in excellent health and is actively engaged in business. The specimen removed was sent to Dr. Hayes of Louisville for examination. He pronounced it carcinoma.

Case 3,—Mrs. O., 30 years old. Was seen with Dr. Jos. Bryan of Lexington. She had come from her home near Winchester to consult him, believing that she had appendicitis. The patient was quite thin and extremely anemic. She had suffered with an uncontrollable diarrhea for some months, passing blood and mucous frequently, pain was persistent, and she was taking opiates for its relief. In the right iliac region, a distinct mass, as large as an orange was easily detected, being in consistence hard, and was somewhat movable. Believing that her trouble was probably malignant, I advised exploration, notwithstanding the case appeared most unpromising. An incision through the right rectus muscle revealed a large,

hard mass, rather firmly fixed posteriorly, involving the cecum. This was removed with considerable difficulty and to get rid of some enlarged retro-peritoneal glands, the mesentery of a considerable portion of the ileum was damaged, required a resection of five and a half feet. The ends of the small and large gut were closed, and lateral anastomosis made between the ileum and transverse colon. To my surprise she stood the operation well and left the table in fair condition. Convalescence was smooth, and she returned to her home in a month, although the diarrhea was still troublesome, and she was quite anemic. I saw her six months after the operation, and she had greatly improved in every way, but there was still some diarrhea. It is now more than two years since she was operated upon, and I was told a few days ago by one of her friends that she had entirely recovered.

These cases are interesting, and encourage me to better efforts in the future. One was made comfortable, and life was prolonged for more than a year. The other two, I believe, are cured, and are now actively engaged, the one filling the exactions of a profession, the other ministering to her children and husband. On the other hand, I know of cases that might have terminated differently, had I appreciated the condition and earnestly advised exploration. One case, an old gentleman from Winchester, has impressed me deeply. I saw him in connection with Drs. McKinley and Clarke of Lexington. At the time of my visit, his symptoms were acute, the pain was great, and the temperature and pulse ran high. There was a small mass in the lower part of the abdomen on the left side which was very sensitive to manipulation. The man appeared ill and his symptoms seemed urgent. All of the attending physicians agreed that the mass was probably malignant, but on account of some renal symptoms there was confusion, and although an exploration was suggested, it was not urged. The patient was taken to St. Joseph's Hospital, and after a time the acute symptoms subsided, he felt better and soon returned to his home. The winter he spent in Florida, but did not improve, continuing to have pain, and lost weight, although the mass apparently did not increase in size. On his return to Kentucky, he again consulted me in connection with Dr. Kinnaird. We both thought an exploration ought to be done, and rather urged it but he delayed wishing further council before deciding. He sought the advice of an eminent surgeon in the Northwest who agreed as to diagnosis and treatment and while there an explor-

ation was done. A malignant mass involving the sigmoid was found, too extensive to remove, so nothing of a curative nature could be done. Recovery from the exploration was prompt, but he died in a few weeks after returning to his home. This man ought to have been operated upon when I first saw him, and, in a way, I blame myself for the delay. Instead of simply suggesting exploration, I should have urged it. The danger attending an exploration is scarcely to be considered when compared to the danger of delay. Even an unnecessary exploration should not cause criticism, surely more good will in the end be accomplished by taking some chance as to the diagnosis. Do not misunderstand me to advise reckless explorations, for never should one be done without making every possible effort to perfect the diagnosis. But no surgeon should be subjected to abuse, even should the exploration be unnecessary, and the internal medicine man should sustain the surgeon in advising early operation, though the diagnosis may not be clear.

Now, gentlemen, my remarks on Intestinal Cancer have been very general. I am talking to the general practitioners, and not to the surgeon, and therefore do not think it well to go into detail, nor do I think it advisable to bring in statistics or to discuss the work being done by a number of eminent surgeons. By referring to the medical journals, it is easy to learn the details and to know of what is being done by the Mayos, Murphy, Ochsner, Deaver and others. My whole object is to impress upon you, and to convince you, if I can, that we are no doing our duty by these cases. Intestinal cancer is curable if gotten to the surgeon early, and the internal medicine man must be the one held responsible for the patient's early or late arrival.

DOCTOR'S DIFFERENCES; THEIR CAUSES AND CURE.*

BY G. G. THORNTON, LEBANON, KY.

The very subject of my paper presupposes that we have differences, and that, having them, we should make an effort to get rid of some of them, at least, by an application of proper remedies.

The incentive to the writing of this paper was a remark made by one of my lady patients who had been under the treatment of two other good men. After detailing her troubles she volunteered the remark, in a

matter of fact way, that the other doctors differed about her case (I suppose she meant diagnosis and treatment) "but," she said, "you know doctors always differ." I could not help feeling that she had given expression to an idea which is very prevalent in the minds of the laity,—that doctors always differ, or disagree. I am willing to admit that they do often differ, and too often disagree, but not that they always do. Of course we differ as finite and imperfect men will always differ on many things, just as we see men in all other professions, trades or callings, doing. Your new blacksmith rarely praises the work of your former smith, but, on the contrary, seldom fails to find something to criticize. Two lawyers will take opposite sides of a case both promising to win and then the loser will content himself, and elient, by berating the intelligence of the jury, and the judge's knowledge of the law. Preachers even differ, one telling you that you can only arrive at the Pearly Gates by a certain straight and narrow way, another telling you that you will arrive at last at the desired haven by almost any old route; and others that you need take no route in particular, as, someway, somehow, somewhere, you will turn up at the right place in the bye and bye.

Merchants, farmers, financiers, preachers, teachers, politicians, milliners, dressmakers, and everybody see things from different standpoints, and differ on some points, then why should doctors, who come from the same source, and are made of common clay, not differ? Some of our differences, in times past, have been wholesome for the profession, and the same is doubtless true to-day and will be for ages to come. Some of them have speeded the wings of progress, while others have impeded the march of our science, and these very differences have, in a very material way, aided us as we have, step by step, planted our feet on a firmer foundation than would have been possible had there been no questions in regard to the various steps. Harvey's discovery of the circulation of the blood met with about the same reception that Jenner's advocacy of vaccination for the prevention of smallpox, or McDowell's operation for ovariectomy, and yet, in due time, all of these have been settled right. The fact is that, while many of our profession differ from others in it, a few years hence may, as they have done in the past, find some differing from themselves of former time. Many theories, and some facts, which, in times past, have been bitterly opposed by the rank and file of the profession, have come to be accepted as true, and, as

*Read by title before the Kentucky State Medical Association, Owensboro, October 11, 1906.

time has sped along, new theories, plans, and operations have been advanced and accepted more and more rapidly, till now many of us feel that we hardly know where we "are at," and some of us even occasionally fall in with a fake, especially if it comes labelled from Germany.

Reviewing in our mind's eye some things wherein we have differed in the past, and where some of the most learned and cultured have been in the wrong, may serve to make the most arrogant of us more tolerant of the opinions of those who hold different views from ours.* * * * But let us come to some of the points of difference of which the public takes cognizance. Being of different temperament, education and culture, ages, mental caliber, we can no more see everything alike than other people differing in these things. Then we differ in the way we examine our cases some being inclined to trace out the cause for every symptom, and to be thorough in examination and diagnosis, while others are careless, and go slipshod along, depending on luck and nature to bring the patient through at last. When these two classes meet in consultation there is apt to be a difference which is unavoidable, so far as the man who is thorough is concerned. Then we have the man who would, to make the patient feel encouraged, minimize the seriousness of the cases coming under his care, and others who would magnify the gravity of all cases. These are those who have "a little malaria," "slightly bilious," "just la grippe," or "a sluggish liver," "threatened with pneumonia," or "afraid of erysipelas setting up," or "possibly blood poisoning," or "typhoid pneumonia," "typhoid dysentery," and "typhoid" everything else.

Then we have men who will go on the witness stand to testify as experts who will give expert testimony positively contradictory, each man being in favor of the side which had him placed on the stand. We can understand that each might be honest in the opinion given, but both could hardly be right, and the public puts little confidence in either, in such cases, and such things always tend to lower the standing of the profession.

While I am admitting that we have differences I want to enter the plea that they are not as great as the public thinks them to be, from the fact that many of them, as seen by the laity, are only apparent, and not real. Suppose one doctor calls a case scarlatina, and another calls it scarlet fever: one calls a case acute articular rheumatism, and another calls it inflammatory rheumatism; one calls a case dysentery, and another calls it flux, or,

possibly, bloody flux; one calls a case gastroenteritis, and another calls it summer complaint; one calls a case acute indigestion, and another calls it cholera morbus; one calls a case acute milk infection, and another calls it cholera infantum; one calls a case auto-infection, and another calls it biliousness; one calls a case puerperal fever, and another calls it septic fever; one calls a case septic poisoning, and another calls it blood poisoning; one calls a case tuberculosis of the pulmonary tissue, and another calls it consumption; one calls a case eczema, and another calls it tetter; one calls a case herpes zoster, and another calls it shingles; and so on, with many other diseases, the public is quick to take up this seeming difference of opinion and magnify a mole hill into a mountain.

Again, the public, in taking up what a doctor has said about a given case, or another doctor, and passing it from one to another, till it has gone through a dozen hands, is just as accurate as when dealing with other tales, and thus often causes differences, or apparent differences, between us. Then we have the surgeon and the general practitioner differing, and often both claiming that a certain case, or condition, belongs wholly to the one or the other.

Having spoken of these most common differences, let us look for a moment for their causes. Why should we have differences in regard to diagnosis? Simply because one man has not made a correct diagnosis, and, possibly, because the second hasn't either.

Why the disagreement between surgeon and doctor? Either the doctor doesn't know as much surgery as he should, or the surgeon doesn't know as much medicine as he should or, possibly, because of selfishness somewhere. Why quibbling and quarrels among doctors anyhow, at any time, or about anything? Simply because somebody is too cock-sure of something which he only thinks he knows, and thinks somebody else is wrong about. Haven't you all seen men who were as sure of the things they thought they knew as they were of the things they really did know? Then we have a few who differ, or appear to differ, from a mere selfish motive.

We now have the real differences which cause trouble between doctors due to a want of information, on one hand, and to selfishness on the other, or, to make it still plainer, to something short in the head, or something wrong in the heart, which, put in the plainest of English, means either ignorance or meanness, one or the other, as the cause for almost any doctor's serious difference. Having worked out the cause we now come to the cure or remedy, and, as in the treatment of

other troubles, we would first begin by removing the cause, so far as we can. For the want of information we would recommend more thoroughness in the education of the profession, not only along lines medical, but along all lines which elevate and lift us to a higher appreciation of the rights of others, and that will enable us to appreciate our own ability at its true worth, and not above it; that will help us to see ourselves as others see us, and help us to know the right, and do it, always keeping in mind and observing the "golden rule," and never the "silver rule," which is said to be: "Do the other fellow lest he do you!"—that will help us to think soberly and seriously of our duty to ourselves, to our patients, and to our professional brethren. The gentleman who knows his duty needs no rule of ethics to enable him to act fairly and honestly, and the other fellows will observe no rule until they are educated up to the point of being gentlemen first. For the doctor who does not know his duty there is possibly no better place to learn it than at our various medical societies,—county, district, and State. Here he comes in contact with their professional brethren unbiased, and sees their virtues side by side with their shortcomings, and can compare them with his own. Here he learns to know himself, and that even he does not yet know it all. Here he may learn the importance of making a clean cut diagnosis, and of calling things by their right names, and of making proper explanations for different symptoms, and not being quite so handy with such indefinite terms as "affected lungs," "congestion," "derangement of liver," "malaria," "biliousness," "la grippe," which have served to cover up an immense amount of ignorance. My idea is, if we are not able to make a positive diagnosis, to say so, giving our ideas as to the probable diagnosis. Nobody now thinks that doctors can know it all the first time they see a case, except the very ignorant, and the more we appeal to the good sense, and the less we appeal to the superstition of our patients, the easier it is for us to handle them, and the easier it is to keep from disagreeing from others in the profession. The truth, and good sense to express it, is bound, always, to agree, while superstitious ideas seldom do. By frequent meetings in societies the ignorant man learns better, and the selfish man sees the position which he occupies, and becomes, by virtue of his association with good men, a better man, and, even if the bad is not entirely rooted out, he becomes ashamed to do the little things which he has done, and thus both classes are lifted up to a higher level, and are

enabled to take a broader, and more liberal view of others, and to always look for the best in them, and return the best they have to the profession.

DIAGNOSIS AND TREATMENT OF INCIPIENT TUBERCULOSIS.*

BY JOSEPHUS MARTIN, M. D., CYNTHIANA, KY.

The subject of tuberculosis, even in its very earliest stages, is a tremendous one. The amount of material written on this one subject alone would fill volumes.

The different modes of infection; respiratory, alimentary, and by inoculation would hardly give a clew to a satisfactory solution.

Neither would the distribution of the tubercles in the different parts of the body, such as the lungs, pericardium, peritoneum, brain, spleen, liver, kidneys, intestines or heart, solve the problem.

Because disease in the peritoneum may be secondary to a focus primarily in a bronchial lymph gland, which was so deeply seated as to have escaped detection, but on account of its close proximity to a blood vessel, inflammatory conditions were set up, its caseous contents ruptured into the pulmonary vein or one of its branches, the thoracic duct, or the superior vena cava, the tubercle bacilli were wafted, not only to retroperitoneal or mesenteric glands, but to the brain and other organs as well, resulting in acute miliary tuberculosis.

The Committee on Nomenclature of the National Association for the Study and Prevention of Tuberculosis, has provided this definition of incipency: Slight initial lesion in the form of infiltration limited to the apex or to a small part of one lobe; no tubercular complication; slight or no constitutional symptoms,—particularly including gastric or intestinal disturbances or rapid loss of weight—slight or no elevation of temperature or acceleration of pulse at any time during the twenty-four hours, especially after rest, expectoration usually small in amount or absent; tubercle bacilli may be present or absent.

Incipency means beginning. Here the definition is confined to the lungs, although the infection may have taken place as a primary process, through the entrance of the bacillus by the respiratory passages, lodging directly in a bronchiole from which it is with difficulty expectorated by coughing; or secondarily, as a result of a transference of the bacillus from a primary focus, such as the tonsil or neighboring lymphatic glands, by the blood vessels or lymphatics.

A disease, the death rate of which in the

*Read before the Kentucky Midland Society, Lexington, January, 1907.

United States is four hundred a day, with an annual loss of \$30,000,000 should receive no little attention. Especially is this statement startling when it is almost an indisputable fact, that were all sputum from tuberculous patients cared for and disposed of in the proper manner, tuberculosis would vanish from the face of the earth.

In incipient pulmonary tuberculosis the word "phthisis" is hardly applicable, just as the word "incipient" cannot very properly be used when the second stage has been reached.

Of the three types of tuberculosis, the miliary, the caseating ulcerative and the fibroid, the second would more nearly come under the definition of the committee named above, because the fibroid is too far advanced; and the miliary too disseminated for such a classification; and then the caseative ulcerative type, is, by far, the most common and most important from a clinical standpoint.

It is extremely difficult to draw a line of demarkation between a purely incipient trouble in the lung and one a little more fully developed. The early lesions, due to infection by inhalation, are generally primary, and are more often found in the wall of a bronchiole and in the alveoli grouped around it. The early lesions, due to infection by way of the blood vessels or lymphatics, are found in the connective tissue between the alveoli and the interlobular capillaries.

At this early stage, before there is fusion of a number of tubercles, there may be no physical signs whatever; the sputum, more or less scanty, may or may not show tubercle bacilli; in fact, in the miliary type the bacilli are rarely found in the sputum, but may be occasionally found in the urine.

According to Frick and Walsh, tubercle bacilli are to be found in the urine in a large percentage of cases of pulmonary tuberculosis, although, Boston, in over 1000 specimens of urine examined for this bacillus, found it in only three specimens. Boston claimed that he had found other acid proof bacilli in considerable numbers, leaving the impression that these other gentlemen, had perhaps, failed to differentiate between the tubercle bacilli and the smegma, grass or butter bacillus.

It is not stated that these cases referred to by Frick, Walsh or Boston, were in the early or late stages, yet one would suppose that those not miliary were past the incipient stage; at a time when there was breaking down of tissue setting free the bacilli to be expectorated in the sputum or carried by other channels into the urine.

The tubercle bacilli may be found in the blood, but here again probably only in the miliary subject.

It is said that the Widal reaction is present in ninety per cent. of all cases of tuberculosis; but since the same reaction is present in twenty-five per cent. of healthy persons, and the former is impracticable and unsatisfactory, the blood, for the time being, is not a popular source for making a diagnosis of this disease.

The statement made by Dr. J. H. Musser, of Philadelphia, in the *American Medical Journal*, December 29th, 1906, that "every person can be infected; only a few can have tuberculosis, seems a little ambiguous, because if a person is found to be infected with tubercle bacilli, he is said to have tuberculosis, although it may be only in the incipient stage. Spitting of blood, provided it comes from the bronchial tubes, is in the vast majority of cases, a positive sign.

Of course, in the onset, the larynx or the pleura may first attract the physician's attention, then, or even before there is a very slight rise of temperature in the evening, and there may be or may not be a cough.

This elevation of temperature has been the forerunner of many a "spell of fever." Some one, speaking about this has said: If the number of cases in which these symptoms have given rise to the diagnosis of "malarial poisoning," could be gathered together they would be a multitude which none could number.

The so-called "night sweats" could hardly be classed as an indication of incipient tuberculosis, because a rise of temperature enough to cause sweating means not only a slight softening of lung tissues, not necessarily associated with fever, but a breaking down, and development of bacteria other than the tubercle bacilli, producing a mixed infection.

Hutchinson says that after careful investigation, a persistent rapid pulse is found without other ascertainable cause, there should always be aroused a suspicion of incipient tuberculosis.

It is very important that an early diagnosis be made. And since microscopic examinations frequently will not show tubercle bacilli until late in the disease, the tuberculin test should be made when there is need of haste and there is no contra-indication to its use. With it I have had no experience. In the hand of competent persons it seems to have proven a valuable agent. Some there are who condemn it, others suggest it only in selected cases while a few use it as a routine practice. More time is necessary to judge whether it has been used properly or abused. It would seem that if tuberculin ever becomes popularly useful as a means of diagnosis that numbers would welcome it into their armamentarium, because not every physician is an

expert in physical diagnosis, but those who are, tell us that by examining carefully the apices, the upper border of the middle lobe of the right and the upper part of the lower lobe of the left lung, there will be found, on percussion, when there is consolidation, impaired resonance or dullness over all parts affected, unless the lesion be very deeply seated. The trouble is more often to be found in the apices, because that part of the lung is not so much used and becomes susceptible to disease. Possibly disease is found in the upper part of the middle lobe of the right and the upper part of the lower lobe of the left on account of the close proximity to the "root of the lung," or the mediastinal glands. These experts also tell us, that in the earliest stages of infiltration, auscultation reveals prolonged expiration in the part involved, some harshness and perhaps a few dry or very slightly moist rales on forced inspiration, or they say that an absence of breath sounds may indicate disease.

When the rales have become coarse and moist there is a breaking down of lung tissue and the disease has passed from the incipient to the second or third stage.

Palpation and inspection also give valuable information.

If more than one *focus* is found it should have an important bearing on the future management of the case, because the primary lesion has perhaps already infected other organs.

A few diagnostic features set out in this paper have been culled from the experiences of some noted men as well as from the limited practice of the writer. No doubt there are some here whose opinions will differ from these, too much stress may have been laid on certain symptoms, or omissions, important and glaring to the initiated, may be brought out in the discussion.

It was not the intention to be exhaustive, no one can hope to be until repeated laboratory and pathologic work has revealed more definite conclusions.

As to the treatment. I was told that another would discuss the climatic treatment. That would leave me with nothing more to say, that is *the* treatment and about the only sensible way to manage a case of incipient tuberculosis. I believe the term "management" would be better than the word "treatment."

The word "climate" which means one of thirty regions or zones, parallel the equator, into which the surface of the earth from the equator to the pole is divided, the temperature, moisture, etc., being different in each zone would really mean the "outdoor" atmosphere in each zone and not necessarily a

"change."

That it can be cured and that a great many spontaneous recoveries take place is evidenced by the fact that 90 per cent. of all autopsies reveal healed lesions of tuberculosis.

There may be a few drugs of service in meeting special indications, but these are rarely needed at this stage. Sunshine, fresh air, rest, and an abundance of good nourishing food by day, and the same by night with the sunshine necessarily cut out, is the only rational way of managing tuberculosis at the present time.

Is not the oak an illustration of the efficiency of this plan? The stunted sapling in the woodland pastures, has become and remains stunted, because sunshine and fresh air are denied it, but the thrifty monarch of the forest, is thrifty and remains so, because the air and sunshine having had free access to it in its tender state, has enabled it to lift its antlered branches heavenward, high above its associates to receive additional rays of life-giving elements. It falls only when its allotted years have been numbered.

The sapling, having abundance of nourishment from the soil, perishes without the sunshine. The stately oak, having an abundance of sunshine, would perish, were it denied nourishment from the soil.

So it is with the "lunger" as he is called out West. Deny him the sunshine and like the sapling he becomes a prey to other bacteria besides the host. Give him the sunshine and like the oak, under the influence of a genial clime, he soon shakes off the host, lifts up his head toward heaven, and in this heavenward look he sees ahead the prospective three score years and ten.

Climate without food is death. Food without sunshine, air, and rest will only continue the suffering. A good digestion is certainly necessary to the successful treatment of any disease, probably more so in tuberculosis.

There seems to be a difference of opinion in regard to climate. There are some who say that the climate of Kentucky is just as good for, or as well suited to the treatment of pulmonary tuberculosis as is any other climate, whilst there are others who contend that every case would seek shelter in the West or South. There are men who go to extremes on this subject, as well as on all others. Appropriate climate for each case would be the way to express it. The attending physician is the one on whom rests the responsibility of selecting a suitable place. He will have to be governed by the financial condition of the patient and his ability to adapt himself to circumstances. Food and rest are as necessary as sunshine, but without peace of mind

a successful termination cannot be looked for. It is said that not more than 2 per cent. of consumptives are unable to leave home, consequently 98 per cent. must be managed at home. In incipency, when there is no contraindication, a high altitude gives the best results. The most important atmospheric condition is dryness. The worst possible climate is one with long continued high temperature and a high dew point.

A uniformly low temperature is much to be preferred to an uniformly high temperature, says Dr. Richard H. Coolidge of the U. S. N. in his report to the Government. But we know that a variable temperature is more suited than either of the above. This, together with a maximum amount of sunshine, altitude, and dryness, is to be found in some Western States.

It would seem that the sanitarium, under the care of an honest expert in tubercular troubles, would be the ideal place for a person suffering from this disease, but the public having been misled, especially in England, as to the real place the sanatorium is to occupy in the cure of this disease—believing a permanent cure could take place in a short time—have lost some of the confidence it formerly had in such institutions.

The sanatoria of our country, although mostly private, if properly conducted, deserve to be patronized, both on account of the good they do the patient and the instruction he gets as to the proper disposition of the sputum, when to take rest, when to take exercise, how to ventilate a room and other valuable information.

The sanatorium is only a part of the cure. Treat the tubercular patient at his home along lines laid down at the sanatorium.

Direct the treatment toward increasing the individual resistance. Careful regulation of the diet and mode of living being essential factors, whether at home, in a sanatorium, or out West.

Before closing I cannot refrain from retrospection. The memory of that morning when we left behind that part of the Rio Grande at the junction of the Texas and New Mexico lines just opposite the land of the Montezumas, where Aztec and Toltec warriors were wont to prostrate themselves before the Sun as their God, will ever point me to one spot on this universe for which I shall always long.

I was told by a gentleman who had passed his early days under and around the leaning tower of Pisa, had traversed Central and South America, and on whom had looked down centuries from the pyramids of Egypt,

that the climate of the Rio Grand surpassed them all.

No wonder the poor Indian saw God in the clouds and heard Him in the wind.

That golden winter sun, as it comes up over that vast territory once roamed by the Comanche, the Apache, the Spaniard and the French, stands above the temples and monuments of the early Spaniards and ancient Mexicans, and goes to rest behind the bosom of Balboa's placid Pacific, seems as it sheds its rays over saint and sinner, to possess the means not only of driving care and sorrow from the mind, but the power to destroy all bacteria, microbes, microorganisms, and microparasites that infest or infect the body.

Well do I remember even the silver lining of the clouds.

Who can deny a person infected with the Great White Plague the opportunity of regaining his former health, or the joy of passing hence under the sky's blue vault, a canopy for his wasted frame?

May the dawn of that day be hastened when the sufferer, who suffers from no fault of his own, may receive the care and attention which the wealth and culture of this land of freedom and bravery can bestow.

MEDICAL NEWS.

SANITATION.

By L. G. CONTRI, M. D., MEMBER OF TRIMBLE

COUNTY BOARD OF HEALTH.

Sanitary legislation has always been achieved under most adverse and opposing circumstances. The voter, however degraded in intellect, appreciates the benefit of a physician at his bedside, but cannot understand that prevention of disease is more easily obtainable than the cure by medical treatment. For ages the only relief had been supposed to be from medicine, and the modern doctrine of superiority of prophylactics is difficult for the laity to comprehend. The genius of modern medicine is prevention, yet the average layman never appreciates to its full value any advice which has saved him from sickness, or is prolonging his life, if he is incurable. We must strive to convince the laymen that it is better to take the advice of a physician in everything pertaining to sanitary and hygienic measures, for by so doing he may be saved from many a protracted sickness, or even death. Little preventative measures may remove causes which,

*Synopsis of an address delivered to the people of Trimble county.

allowed to continue, will accumulate in a fund of future trouble. The measures prescribed by medical men are wholesome, but they are scorned and ridiculed by persons whose very official position should prompt them to assist rather than to oppose the medical men's noble work. The officer of the law, who has solemnly sworn to do his duty toward the Commonwealth by enforcing the commands of the law, should be a brave, wise man. It is his sacred duty to uphold laws that benefit the human family rather than openly oppose them and thus become an accessory by aiding and abetting the violators of these laws, and by so doing become guilty himself. It would seem a better policy for these officers to favor development toward sanitary measures commanded by the Board of Health by emphasizing the natural rewards, rather than arouse opposition and promote retrogression.

The vast tables of statistics tell us the benefit of medicine and years of patient labor were essential to educate the masses upon the subject of hygiene, and that the enforcement of sanitary regulations could entirely eradicate certain species of disease.

When it has been demonstrated with reasonable certainty that the suffering of disease and death itself could be averted by complying to natural rules of health, that legislation for so self-evident a necessity would follow as a matter not of course, but by an overwhelming popular demand. When sanitarians first presented their views to the legislative body, they encountered great opposition.

The first argument urged against, came from the great increase of expenditures. States objected to being aggravated with more expenses, cities pointed to their immense municipal debts and asked to be relieved from the responsibility of assuming greater burdens. When it was mathematically demonstrated that by legalizing sanitary acts a community would save far more than cost, the loss of trade in the commerce of cities, the heavy expenditure for medicine, by services involved by the visitation of small-pox to a city town or village in a single year would amount to ten fold more than necessary expenses for a thorough vaccination, which would have absolutely eradicate the disease from the community. Then laws were enacted by the different legislatures of all the States in the Union and State Boards of Health were locally established. Bills passed by the different legislatures creating boards of health were a public necessity and demanded by advanced science of the age, urged by physicians and demanded of every political party and supported by mem-

bers of the legislature, with the view to benefit the human family.

The sanitary legislation for the protection of public health involves the right of the State to abridge to a certain degree the liberty of the individual for the purpose of accomplishing the greatest good to the greatest number. In fact it needs an almost unlimited power for the State to entrench so far on personal liberty as to make vaccination compulsory, to stop certain kinds of manufactures within city limits, to compel men to construct certain kinds of drains for their houses.

Ask then, if, after the common cause made for the establishment of these great enterprises tending toward the improvement of the race and amelioration of suffering made by men of all political views, is it not indeed a lamentable exhibition of unvarnished, unwarranted, thoroughbred piece of self-conceited ignorance, if not malevolence, to find that in our community certain persons are disregarding all of these facts I have related, and are given bad example and advice in regard to some measures taken by the Trimble County Board of Health. It seems a shame and disgrace that some of the people of Trimble County, so law-abiding, so intelligent on many subjects, should be so prejudiced in regard to vaccination; the prevention of small-pox.

Few diseases have been so destructive to the human family as small-pox. The only known factor in its origin is contagion, this malady being the most contagious of all diseases. The atmosphere around small-pox patients is charged with the products of the disease. It is communicable from its earliest manifestations to its close—even after death; no age, sex, color is exempt.

The most important of all conditions tending to effect the mortality from smallpox, alike in the individual or community, is protection afforded by vaccination. The value of vaccination is a necessity and consequently is a necessity to have a law compelling its acceptance by those who will not of their own free will seek its protection. Before boards of health can accomplish any practical results the people must be taught that protection of their health and life by sanitary regulations is as much a matter of public concern and protection of their civil rights and practical liberties. It costs the State of Pennsylvania \$350 for each person quarantined to prevent the spread of small-pox. During 1905 \$2,000,000 was expended, or, as well said by Dixon, was wasted, to gratify a whim of those opposed to vaccination.

Williamsport, Pa., expended in December, 1905, \$284 for each of eighteen cases of small-pox, at the same time protecting several thousand persons by vaccination at the cost of \$0.29 each. This record should appeal to persons whose gray matter can be aroused only by excitation of their pocket-books.

Veritably small-pox is a luxury, not a necessity!

ANNUAL ADDRESS.*

Another year has rolled round. Time flies, more and more swiftly. Is this impression with me the effect of advancing age? I cannot think it results from increasing solicitude or a feeling of reluctance at being hurried on toward the end of a long life, or because the period of expectancy is reduced to the remnant of a lifetime.

However, it is to be explained I am continually surprised at the brevity of the current measures of time.

With these thoughts of the shortened and shortening future, I regard this retirement from the front of our Society as final beyond any probable rotation. In fact, I thought a year ago it would be better to put here a younger man, one more efficient and more progressive; that it would be better for the advancement of the Society and for its achievements. But I realize gratefully that I have been honored on account of my age (82) and for the length of my professional life—(56 years).

I expect, however, to still do some practice and to retain an interest in medicine. It might be agreeable and becoming to "ease oars" and glide passively down a smoother decline. Besides the force of habit to keep me going, I am not without some contingent necessity for a livelihood.

While I continue to have this interest and incentive, and to take some active part (sometimes there is a call for the "old doctor") and while I am rational, sensitive and conscientious, I may expect, anon, to become engaged arduously, to be anxiously concerned, tried, perplexed, and, it may be, baffled, defeated and grievously depressed, or oppressed, with sense of duty. In much of the practice of medicine that I have done, however, fees have been of minor consideration.

I once heard a doctor, an old one, when testifying as to the proper amount of a fee, deny that he had acquired the wealth attributed to him by the practice of medicine, but he said he had made it by speculation. It is a

noticeable fact that many practitioners resort to other vocations. Some have a passion for farming, they say; some condescend to engage in banking; some deal in lumber, or some such traffic; some swap horses, and some train the Elks. But, whether these things be necessary or not, it is the conclusion of my experience that it would generally be better for a doctor to stick to the work of his profession, to attend closely to his practice, always considering that an important part of his work is to collect his fees.

Here is where I have, myself, failed. It is one of the causes of my shortage of success. I have tried to reconcile myself to this and to find some consolation to compensate me for the thousands I have lost, claiming some credit for charity. But when I remember the individual disappointments I have suffered, not only from the triflingness and worthlessness of many I have served, but from their bad faith, treachery, and downright rascality, I realize that I should have collected more rigidly; that I should have refused to be imposed upon. Would you see my *black-list*? You all should register it. Here is a good looking young man (if you do not scan his countenance), well dressed, with gold-plated teeth, having clever kinfolks, and a lady for a wife. He calls for obstetrical service; receives prompt and faithful attention, day and night, successful results, kindness and comfort to the utmost. Then, after a time of clownish reticence and passing pay days without any special misfortune, he settles by a notice in bankruptcy.

Just think of a young man, a fellow of pretensions (pretentious pretensions) who will bankrupt ten dollars for the delicate care of his primiparous wife, and the safe birth of a son, of which he is unworthy. It makes me despise all men of his shape, condemn the name he disgraces, and feel a shudder of disgust whenever and wherever I see him. Then there passes in my loathing recollection another little shyster, for the greater shame of his "fisty" kind; and I have to describe a big necked, beastful citizen, adding variety to the contemptible class who impress their low instincts upon the progeny of good women, and who are too illbred to thank an accoucheur for the safe birth of the offspring of their honeymoon or of their prenuptial gratifications.

And here is a man, one of several, who comes with a case of "running at the reins," which he says he got by lifting. He swears me to secrecy; saying "for God's sake don't let my wife find out about this." Then follows in succession tedious and troublesome treatment of two "cases," with shameful lying on my part to the woman as to what's the

*By J. W. F. Parker, retiring President of the Pulaski County Medical Society,

matter with her. And, finally, relying upon my fidelity to the good name of the family, my bill is totally skipped, and all former professions of the recklessness of expense are forgotten. But I have to regret more deeply a large class of lost labor, not all black but decidedly blue, because of its greater magnitude, and because it resulted from stupid indulgence on my part, silly deference, and illy judged policy, practically awaiting the waning fortune, the vanishing solvency and the forgetfulness of ultimately disappointing patrons. In short, I have to lament the result of the crediting system, which in our business reaches its zenith, and has focused on me. But, doctors, this is unsuited for a valedictory. Thank the Lord my chart has a brighter side. Some self congratulation is possible. Having chosen a noble calling for my life work, though I have come short of its coveted high standard, yet I have been favored with grateful commendations among fellows of my profession, whose judgment is more to be esteemed.

While I have been conscious of mistakes, and have felt want of proficiency, I have seen my efforts, erstwhile, attended with success, and sometimes rewarded with inestimable good to those for whom I have become interested, not always without their gratitude and appreciation.

But among fellow physicians, in their association, receptive of their fraternal courtesy, enjoying the amenities of the profession, and proud of the progress of medicine and surgery, in all their noble attainments, during my time, I have found gratification through a strenuous life of study and practice.

Now resigning the annual wield of the gavel, I say to you all, severally and to the Society, happiness, honor and success.

CORRESPONDENCE.

THE INSURANCE FEE IN NELSON.

Bardstown, Ky., Nov. 3rd, 1906.

All of your communications and resolutions of our State Medical Society regarding life insurance examinations have been received and perused with interest, and I am glad to say to you that they all come too late to do Nelson County doctors any good, but, however, we of Nelson are glad that the State Medical followed so soon in our footsteps.

That it may assist other counties I will tell the readers of the *State Journal* how we did this. At the March meeting of the Nelson County Medical Society resolutions were offered and unanimously adopted condemning the practice of certain life insurance companies for reducing the fee for examinations

from \$5.00 to \$3.00, and authorizing the President of the Society to appoint a committee of three physicians to secure the names (if possible) of every doctor in Nelson County to an agreement, viz:

"At a meeting of the Nelson County Medical Society held in Bardstown, March 7th, 1906, the following resolutions were adopted:

RESOLVED, That a committee of three members of this society be appointed by the President to secure the signatures of every doctor in the county to an agreement to write a letter of resignation as examiner to every insurance company for which he examines, which pays less than (\$5.00) Five Dollars for examination, which agreement shall contain the following provisions:

"First:—That all insurance companies doing ordinary life or industrial insurance in Nelson County, shall be charged the sum of \$5.00 for each examination made, and upon failing to pay that amount I agree to resign my position as examiner for said company, and not to accept any commission as examiner for less than that sum for each examination made.

"Second:—That I agree that I consider this agreement binding, provided three-fourths of the physicians in the county sign the agreement.

Third:—That upon failure to abide by the conditions of this agreement, I relinquish and forfeit all claims to eligibility to membership in the Nelson County Medical Society.

Fourth:—That each examiner in sending in his resignation shall notify the company of this proceeding.

"J. J. WAKEFIELD, President.

"Attested.

"HUGH D. RODMAN, Secretary."

This agreement was signed by every doctor in the county except one, who is both farmer and doctor, and is never likely to be asked to examine for any company. The solicitors for several of these \$3.00 companies soon began to ask us, beg us and implore us in every way to examine for them, and finally one General Agent threatened that ten or a dozen of these companies would join together and hire a man at a fixed salary and locate him here to do all of their examining. All such statements, and many other stronger statements were made, but to no effect, and now no \$3.00 company is doing business in our county, only the good old line companies, such as the Mutual Benefit, North-western, Aetna, Citizens, National Life, and such as those, which have always paid \$5.00 can now do business in Nelson County. Personally this change was hard on me, as I was the examiner for four of these \$3.00 companies, viz: Mutual Life, New York

Life, Travellers and Home Life, and in addition my son-in-law was a successful solicitor for the Travellers, but we stood our losses for the general good of the profession.

Now, Mr. Secretary, I have given you in a few words how we of Nelson met the big Bulls on the bridge and "shoved" them off, and are now glad of it. If the doctors in every county in the State will agree, they will have no trouble in ousting all of these \$3.00 companies from the State.

I would advise them to draw up some kind of an agreement and to solicit personally every physician in the county to sign it, and in this way every man becomes interested and will sign.

Any assistance or advice that we of Nelson can give others will be cheerfully given.

HUGH D. RODMAN, Secretary.

COUNTY SOCIETY REPORTS.

Adair.—The Adair County Medical Society met on Thursday, March 14th, with the following members present:—R. Y. Hindman, President; U. L. Taylor, Secretary; W. F. Cartwright, S. P. Miller, W. R. Grissom, William Blair, and C. M. Russell. The roads were in such a horrid fix that the county doctors, except Dr. Blair, could not get here. After some preliminary business of no general interest, Dr. Blair read a paper on the Origin of Medical Science. The paper was a very thoughtful one, and one that required a good deal of labor to prepare. Dr. Blair in his papers always gets to the bottom of things. The paper was discussed by all the members present, but they could say but little about it. The discussion drifted into a general talk on superstition, and it was found that very few of the members were entirely free from it. One doctor said that in making out powders for a patient one day, he found he had prepared thirteen. He said to himself, "now if I leave this number and the patient dies, I shall always believe that he died from the number 13," and he then and there made one more. In case of this kind I should have taken out five or six and put them in the fire. I think the patient would more likely have died from 14 than 13.

U. L. Taylor read a paper on the Public Health, in which he took advanced ground against mosquitoes, flies, and other like plagues. He advocated a stringent anti-cigarette law, and advocated the total abolition of the habit of spitting. He urged the doctors present to quit spitting by removing the cause, the use of tobacco. This paper was well received, and discussed more or less by all present.

Dr. Cartwright reported a singular case:—A woman was nursing a baby ten or twelve months

old. The woman was menstruating occasionally, not regularly. The baby was sickly, puny, and doing no good. The woman had an abortion at 4 or 5 months. She made a good recovery, and the baby nursed all the time. After the recovery of the mother, the child commenced to flourish and to grow, and is now, after 2 or 3 months a strong, healthy child. The question now is was the seeming menstruation real, or was it uterine hemorrhage threatening abortion?

Dr. Hindman read a part of the code of ethics, the duties of physicians to each other, which was followed by a very pleasant discussion.

The meeting was a very pleasant one, and much good was seemingly done. Dr. Z. T. Gahbert sent his name, but on account of the roads he could not come. All the members present, agreed to do all in their power to get every doctor in the county into the society, by the next meeting, at which time all the dues will be paid.

R. Y. HINDMAN, President.

U. L. TAYLOR, Secretary.

Anderson.—The Anderson County Medical Society met at the office of G. D. Lillard on March 4th, 1907. Those present were Drs. Pindar, Davis, Lillard, Milton, Crump, Paynter, Murdock and Gilbert.

The meeting was called together by the President, Dr. Pindar. It was agreed to depart from the usual program and examine a case Dr. Murdock had present. This case presented the following; there was a fistulous opening just over the coccyx, one on the front and upper third of left thigh, and one on rear and upper third of right thigh. There was a history of a fall from a wagon several years ago. No specific history, but some tendency to tuberculosis in the immediate family. Dr. Murdock put the child on Syr. Iodide of Iron and dressed the fistula aseptically, and it has shown great improvement under the treatment.

All present agreed that the trouble was of a tubercular nature. Dr. Paynter said that he used Elix. Iodo-Bromide Calcium Compound in similar cases. Dr. Milton suggested the use of diluted Tr. Iodine locally and Iodized Calcium (Abbott) internally.

The father of the child stated that it had improved a great deal under present treatment.

Dr. Lillard gave an exhaustive and interesting report of a case of "Pyemia" following La Grippe. Patient, woman, age 72, had an attack of La Grippe on December 1st, temperature 100 to 101. On December 21st, severe pains in left knee, next day the left knee, both ankles and wrists and little finger on left hand were involved. On 26th little finger was lanced; a quantity of green pus was let out. The ankles and wrists were afterwards lanced and a quantity of

pus let out. The patient showed some improvement after these places were lanced.

Treatment. — Iodide of Iron and whiskey. Morphine was not given more than three or four times as patient could not stand it.

The wounds were kept clean. Diluted Iodine and Peroxide of Hydrogen were used locally, but gave such great pain that normal salt had to be used. She had two or three chills during her illness and finally died on the 6th of February last. Two days before death the character of pus changed. At this time the right foot was gangrenous and most of the tissue of the ankles had sloughed off.

Dr. Murdock opened the discussion. He indorsed the treatment used, but thought that it was a case of septicaemia.

Dr. Davis suggested that this would have been the kind of case to have been benefited by anti-streptococci serum, but Dr. Lillard said that he objected to using "Baked Bugs" on his patients.

Drs. Simpson, Crumme, and Milton were elected to membership in the society. (All doctors except two are now active members of the society; i. e. in active practice.)

The president then explained how the dues of the society were used and requested all to "pay up."

Dr. Crumme made an interesting talk urging the society to keep up the patent medicine fight. The society discussed this at length and also other matters of local interest. The society adjourned to meet at the office of Dr. Kavanaugh on the first day of April.

J. W. GILBERT, Secretary.

Barren. — The Barren County Medical Society met at Glasgow March 12, with C. W. Froedge presiding. Owing to the unfavorable weather the attendance on the part of the doctors living at a distance was small. Am sorry to say they missed one of the best meetings for a long time. Several minor topics were discussed, but the program as arranged was not fully exhausted, and remains to be finished next meeting. Dr. Froedge brought before the Society a case of congenital hydrocephalus. The first ever before the Society. Nothing unusual was brought out in the case or its treatment. A very marked feature of the meeting was a didactic lecture on the therapeutic application of ergot. It would seem that as old a remedy as ergot would be a dull subject, but with an experienced man like Dr. Jepson to use it, and then tell you about it, seems almost like a new remedy. We are pleased to announce that we were honored with a visitor, Dr. Will Depp, of Metcalfe County.

R. S. PLUMLEE, Secretary.

County Medical Society was held in December. The following officers were elected, President, Fayette Dunlap; Vice President, H. M. Pittman; Secretary, F. H. Montgomery. Fourteen members were present.

F. H. MONTGOMERY, Secretary.

Calloway.—The Calloway County Medical Society was called to order by President Evans in Drs. Mason and Evans' office. After the minutes of last meeting and committees that had been appointed were disposed of, plans for holding special meetings with the other professional men of the town as lawyers, ministers, and dentists were discussed. The Secretary was instructed to set dates and arrange for such meetings—the President to appoint a committee to arrange programs.

It was decided to hold a special meeting Saturday, April 6th at 1:30 P. M., to which the entire Fiscal Court should be invited, to discuss the needs and plans for educating the public on sanitation against tuberculosis.

Drs. Hart and Graves were appointed to arrange programs for this meeting.

The following program for the present meeting was then taken up:—Dr. W. H. Mason to quiz for 30 minutes on (1) Management of Abnormal Presentations. Dr. C. N. Crawford 30 minutes on (2) Diagnosis and Treatment of Placenta Previa. Dr. W. F. Grubbs, 30 minutes on (3) Diagnosis—Prevention and Treatment of Puerperal Eclampsia.

As the Delegate to State Association from this county had moved away the office was declared vacant and the Society proceeded to elect his successor. Counting of the ballots resulted in the election of Dr. W. H. Graves. The roll was called and the following members responded:—Drs. E. D. Covington, E. B. Curd, C. N. Crawford, Newton Evans, W. H. Graves, P. A. Hart, C. E. Scholes and J. T. Walls.

NEWTON EVANS, President,
W. H. GRAVES, Secretary.

Christian.—The Christian County Medical Society met at 11 A. M., Jan. 16, 1907, in the city court room. The President being absent, J. M. Dennis was elected pro tem to fill the chair, which he did with grace and ability.

Those present were Drs. Stites, Jackson, Keith, Woodward, Bacon, Peyton, Harned, Dennis, Sargent, Stone, Blakey, Erkeletian, Rollow and Edwards.

Dr. Stites' paper on Protection of the Innocent from Venereal Infection and Prostitution was one of the most learned and instructive papers ever read before this society. The discussion was able and enthusiastic.

Dr. Erkeletian stated that in his opinion the

Boyle.—The regular meeting of the Boyle

only way to control the evil was to close the bawdy houses. Dr. Woodard did not think this the best plan, as private houses would be opened instead. The doctor stated that New York City did not have a licensed bawdy house within the city limits, and yet nearly every house on some streets was a house of bad character, run under the head of boarding apartments. The doctor's theory was to condemn the lewd men and to treat them in the same manner we do the lewd women, even though they be men of good standing otherwise.

Dr. Harned suggested that through religious influences we might be able to accomplish better results. But in my opinion, with all the theory advanced, it will be a many long day before fornication will be made unpopular.

A. H. EDWARDS, Secretary.

Cumberland—The Cumberland County Medical Society met at its regular time in the office of W. C. and L. O. Keen, our president, A. W. Sharp, being absent on account of high water, H. L. Cartwright was selected to fill the chair. At 1:15 he called the house to order, W. F. Owsley was put in the secretary's chair, at this point a vote was taken by the house, that unless he would take notes of this meeting and send them to the State Journal, that it would be better to leave the chair vacant as this Society and its proceedings had not been reported for some time, and that the impression had gone forth that we never met. We have not met as often as we should have done, nor as often as we could have done, but at each meeting we have had cases reported, and good able papers read and discussed.

The acting secretary was ordered to collect the dues from those present at this meeting who were J. G. Talbot, L. O. Keen, W. C. Keen, H. L. Cartwright and W. F. Owsley.

The acting president then asked for report of cases, and he found that each doctor was loaded down with interesting cases each one was freely and ably discussed by all.

Next came the reading of papers on some very interesting and important subjects they too were freely discussed, in fact we had many good things at this meeting and the members who were absent from this meeting certainly missed a treat. Some of the members were absent on account of high water, and muddy roads, but some did not send in their excuses.

The program for our next meeting is as follows: Acute Rheumatism, by L. O. Keen; Report of a case of Abortion, by H. L. Cartwright; Diseases of the Rectum, by W. C. Keen; Hay Fever, by W. F. Owsley.

W. C. Keen presented a man before the society who was suffering from poison-oak of the face which was an interesting case.

It was decided at this meeting that the Cum-

berland County Medical Society would at an early date invite its neighbor members to meet with them, and have an all day meeting at the courthouse, and a banquet at the hotel that night, this we expect to be one of the largest things of its kind ever had by a small county society, a special program will be arranged for the occasion.

W. F. OWSLEY, Secretary.

Fayette—The Fayette County Medical Society met February 12th, at 8 P. M., A. H. Barkeley in the chair.

The subject of having a stenographer present to report discussions was considered and referred to a committee for investigation.

The post-graduate work was again discussed and referred to the "Medical Faculty."

Charles Vance made application for membership. David Barrow read a paper on "Intestinal Cancer." Discussed by Drs. VanMeter, Scott, Stucky, Clark and Barrow.

John Maguire read a paper on Anaesthesia. Discussed by Drs. Clarke, Stucky, Pryor, Marks, Smith, VanMeter and Maguire.

R. JULIAN ESTILL, Secretary.

Fayette—The Fayette County Medical Society held a "semi-public" meeting on Tuesday evening, March 12th, at the public library, about 150 people were present and matters of interest and importance both to the medical profession and laity were presented. Dr. J. A. Stucky read a paper on "The People of Lexington and the Medical profession." Dr. W. B. McClure read a paper on "The Relation of the Doctor and Druggist." The subjects were fully discussed by Dean W. T. Capers from the standpoint of the minister, and Hon. W. Rogers Clay from the standpoint of the lawyer, and John Cramer from the standpoint of the business man.

A number of short talks were made by lawyers, doctors, and business men present.

R. JULIAN ESTILL, Secretary.

Jessamine—The Jessamine County Medical Society met in regular session February 21, at the office of W. H. Mathews, in Nicholasville. The meeting was called to order by Vice President J. S. Barnes. In the absence of the secretary the reading of the minutes of the previous meeting was dispensed with.

A. Penick read a paper on "Scarlet Fever," which was thoroughly discussed by all present and was highly complimented. W. H. Mathews lead the discussion and brought out some points in symptomatology not mentioned by many authors. J. S. Barnes read a paper on "Delirium Tremens." This was an exhaustive paper and was discussed at some length by

all present. Dr. Fish lead the discussion on this paper.

The name of J. E. Willis was presented for membership and referred to committee. Drs. Fish and Pentz appointed to read papers at next regular meeting. The society then adjourned.

M. C. PENTZ, Secretary pro tem.

Jefferson.—The Jefferson County Medical Society met at its twenty-eighth stated meeting with the President, S. J. Meyers, in the chair. Treasurer's and Secretary's reports read and approved.

Communication from State Society regarding meeting of State Society in Louisville in October, and the sending of complete minutes of Jefferson County meetings as soon as possible for publication in the State Journal read and filed.

Under Report of Committees: — Wm. Ed. Grant, Chairman of Insurance Committee, asked for more time. W. F. Boggess, Chairman of Committee appointed to confer with Committee of Kentucky Anti-Tuberculosis Association, read a communication from B. Flexner, also a resolution passed by that body (resolution herewith attached), report of committee accepted and committee continued.

The President read a communication from the Editor of The Louisville Times regarding the alleged statement made by Dr. Hendon regarding a surgical case, the Editor stating Dr. Hendon had nothing to do with the statement appearing in the paper.

The Secretary was instructed to subscribe for the daily papers and continue to put in the scrap book all notices and articles regarding physicians in the city appearing in the papers.

Motion made by Dr. Bloom seconded by Dr. Vance to appoint committee of three from the Society to confer with like committee from Board of Trade and other organizations regarding the question of telephone rates; motion carried. Committee — Drs. Satterfield, Bloom, and Zimmerman.

Dr. Frazier submitted a full and complete report on the progress of the Milk Commission.

The thanks of the Society was accorded the Commission for the time and work they are giving this subject.

Dr. Frank then submitted the following motion; seconded by Dr. Wilson :

“Moved, That the members of the Jefferson County Milk Commission be appointed a committee to investigate the matter of protecting the Jefferson County Milk Commission in its certification of milk and that it be further moved that this Society disapproves the certification of milk by any member of the medical profession of Jefferson County other than the Jef-

erson County Milk Commission appointed by the Society. Motion carried unanimously.

Dr. Reynolds suggested that the Society petition the Council to recognize the Milk Commission.

Dr. A. O. Pfingst then reported case Bilateral Bezold Mastoiditis which was discussed by Drs. Speidel and Dabney.

The Secretary was instructed to have the proceedings of the meeting in the hands of the State Secretary by the 15th of the Month following the meeting.

At 10 p. m. the Society adjourned to lunch.

EXHIBITION OF CLINICAL CASES.

Dr. Bloom: I have an interesting case of elephantiasis which I would like to show to-night. It is interesting more particularly because it is on a syphilitic base. I showed the case to the Surgical Society in January and reported it as being on a syphilitic base. In the February number of the Journal of Cutaneous Diseases, Rivola reports a similar case and reports the frequency in which it is on a syphilitic base.

The case has been under treatment since December and there has been improvement, the improvement being marked in that some of the ulcers have healed here and the fissure which we see at the junction of the foot and the leg has also healed. The hypertrophy of the epidermis is apparent in these cases. There has been no general infection. The disease started four years ago. She is a woman of 54 years of age and has four children. Four years ago she had a miscarriage which would make it at the age of 50 if we can accept her statement as to her age. Following that was the beginning of the trouble. It began on the foot as a blister. The disease began as a serpinous syphilide which we see here. The fissure developed at the site of the old serpinous syphilide and lymph stasis followed as a result. This syphilide has markedly changed since she appeared.

She is now on anti-syphilitic remedies with little benefit, the only benefit being the healing of the ulcers and the healing of the fissure.

That is all that there is interesting in the case except the hypertrophy.

PNEUMONIA.

By Edwin T. Bruce, Louisville.

Pneumonia, because of its exceeding prevalence, short duration, and frequent fatal termination, commands our most careful consideration. It is equally serious in patients of all ages and in all walks of life. The statistics of the Boards of Health of all the States of the Union show that the mortality of pneumonia exceeds that of tuberculosis. More people die each year from pneumonia than from consumption. It is also a well-known fact that the mor-

tality of this disease itself has increased. Can this increase of mortality be satisfactorily explained? Has the type of the disease become more severe? or has its prevalence and fatality increased, because of local conditions favoring its generation and development? or has the treatment of this dread disease known no advance? It is undoubtedly true that the type of pneumonia is now more severe than in former years, and it is also true that the congested conditions that exist in all large cities renders the incubation of any disease more feasible, and these conditions are peculiarly conducive to the breeding of pneumonia. Poor ventilation, overheated houses, in-door employment, sedentary occupations, these are the surroundings of the very large majority of cases who are attacked by pneumonia. Another reason for its great mortality is, that too frequently a physician is not called until the disease, because of its rapid course, has so far developed as to render medical aid unavailing.

Science recognizes these unfavorable conditions of environment. In many of our large hospitals the open-air method of treating pneumonia is employed. This method has highest professional endorsement, and the best results are claimed for it. In the Children's and other Hospitals in New York City, the patient constantly breathes fresh air—not air that has been artificially heated, but fresh out-of-doors atmosphere; the body of course is kept warm by clothing the patient suitably to the temperature, precaution being taken to prevent chilling. The percentage of mortality has largely diminished by this method. It is not impracticable to employ this method in many cases in private practice, but should be used only where a competent nurse is in attendance. Good nursing is indispensable in pneumonia, the prompt and implicit obedience of the physician's instructions are absolutely required. Where the open-air method cannot be resorted to, the greater must be the care in nursing and the closest attention to every phase of the disease must be given by the physician.

It is well to start the treatment of pneumonia with calomel given in small doses often repeated, following this with a saline, preferably Epsom Salts, and to repeat the calomel during the course of the disease if necessary. One of the first things to be done is, as already indicated, to see that the patient has plenty of fresh air. The fever, unless there be nervous symptoms present, such as marked restlessness or delirium, is not necessarily an indication for special treatment. When these symptoms exist they can be treated with benefit by enveloping the chest with sheets wrung out of water at a temperature of 50°, continuing the application for ten minutes. This also has a tendency to relieve the congest-

tion. Other local applications to the chest are beneficial only in controlling pain. The diet should be liquid, composed of milk, eggs, albumen water and broths. The patient should be urged to drink plenty of water.

When the cough is a distressing symptom, codeine given in the beginning in 1-4 grain doses every four hours has a beneficial effect. At times the use of heroin in 1-12 grain doses aids a distressing cough. The insomnia in pneumonia is a condition which should not be allowed to continue for any length of time, on account of the distressing nervous symptoms that are liable to attend this, trional and veronal are the least harmful hypnotics and should be given in 10 grain doses.

The pulmonary edema in pneumonia is best treated, I think, by 15 to 30 minimum doses of 1-1000 Adrenalin Chlor. Sol., given hypodermically every fifteen minutes for 5 doses, then every half hour for four doses. Cupping the chest is also indicated and is of marked benefit. Oxygen is also of value, but still holds its place as the fore-runner of the end.

As we all know, the most distressing condition attending pneumonia is that of cardiac failure. The first indication of systolic weakness and failure of arterial tonicity leads to the administration of cardiac stimulants. The three principal ones are, alcohol, strychnine and digitalis. Alcohol is the most important cardiac stimulant and the one upon which the greatest reliance is placed. Whiskey is the form used given in 1-2 ounce doses at intervals, varying from every hour to every four hours, according to indications. These indications are small, incompressible, rapid, feeble and often intermittent or irregular pulse, associated with absence of first sound and diminution of apex beat. Strychnine, when we remember the physiological action of this drug, how it stimulates the heart and tones up the arterial system by its direct stimulant action on the vaso-motor centers, and not like alcohol and digitalis by its action on the heart muscles and arterial wall, we find an explanation of its effectiveness. It whips up the heart, one might say, from its powerful nerve center. Strychnine is never followed by the secondary nerve depression, so often seen after alcohol. There are two indications which especially call for its use—First, when whiskey is not able to hold the heart, it should be used as a re-inforcement. Second, when there is evidence of pulmonary edema and cyanosis, it should be given hypodermically in 1-20 grain doses. All alcohol cases especially respond to the action of this drug. Digitalis is indicated when cardiac dilatation puts in its appearance and there is marked failure of compensation.

Saline injections into the rectum are of marked benefit. Especially in alcoholics and in cases

in which nutrition is failing, 8 oz. of normal saline thrown into the rectum about once in four hours are well retained. I think that saline enemas would be of benefit in every case of pneumonia, they can do no harm.

Permit me to make a plea for the more general use of morphine hypodermically in the early stage of the invasion, a stage in very many cases accompanied by not only the shock to the nervous system from a sudden and overwhelming toxemia, but the distressing pain often amounting to the agony of a pleurisy associated with the development of the pneumonic process. The shock to the nervous system in many cases is intense. Patients generally rally from this condition, but often with a marked cardiac weakness. I believe that if we made a routine practice of giving cases presenting these symptoms, two or three full doses of morphia hypodermically we would not only relieve the pain, but would minimize the nervous shock, and certainly, remembering how morphia sustains the heart, we will start our patient on the course of the disease in a very much better condition. Morphia later in the disease is seldom required and should be administered guardedly. Quinine has been recommended by some practitioners in doses of from 50 to 60 grains often repeated, and the advocates of this treatment claim that it is a specific in these conditions. We take issue against this claim for the following reasons: Quinine in doses of 50 to 60 grains has an irritating action on the stomach which is liable to cause distressing symptoms, such as nausea and vomiting. In being eliminated quinine has an unfavorable action on the kidneys, causing haemoglobinuria and even albuminuria, which would, if nothing else, cause uneasiness. Quinine in large doses is depressing in its action so that collapse is more liable to follow. It is well, therefore, to discard a remedy that, although so helpful in many other diseases, is apt to produce or magnify conditions that must be overcome in the successful treatment of pneumonia. High temperature in pneumonia is not so serious a matter as the cardiac failure which so often precedes fatal termination of the disease. It is to avoid this condition our efforts should be directed. Because of the short duration of the disease, if it is possible to keep the heart strengthened against attacks of depression, this great danger may be avoided. A temperature of 103° to 105° may be evidence of the resisting powers of the patient, whereas a long subnormal temperature indicates the decrease of vitality. Pneumonia is not a long siege, but a sharp, short battle, and all the strength of the patient is taxed to the utmost, therefore, care should be exercised not to give great quantities of medicine, but on the con-

trary, only such remedies as are useful in enabling nature not only to resist, but to conquer.

Dr. Boguess: The very excellent paper of Dr. Bruce leaves little to add and the only discussion I care to make is to emphasize some of the very excellent points that he has made.

I do not think the profession fully appreciates the great frequency of pneumonia at certain seasons of the year and the great mortality of it. There is no question but that at certain seasons of the year it is the most fatal malady with which we have to deal.

The result from our treatment is a sad commentary upon our absolute helplessness in many of the cases. There is no question but that the old method of treatment, the so-called antiphlogistic treatment if you choose to call it, gave better results in the treatment of pneumonia than we have to-day. Another fact that we recognize is that the old country physician with his lack of scientific knowledge, oftentimes not being able to tell you how he makes a diagnosis, has a reputation as a pneumonia doctor and he has better results than we under the best environments and the best care and the best nursing. There are two factors that play a part. One is that the country doctor has a better caliber of patients to deal with than we have in the city. Another factor is that they get better air in the country. The houses are not so close as ours. The patient gets more pure oxygen and he stands a better fight in a disease in which the lung is so crippled as in pneumonia. I believe that is the advantage in the open air treatment that has been practiced at the Children's Hospital in New York City. They take the little children out on the roofs of the hospitals and keep them there during the course of the disease. This has proven of considerable benefit.

I think we would get better results in pneumonia cases if we would practice venesection in many cases. This would relieve the heart and give the patient a better show to fight the toxins and would limit the course of the disease.

I have never seen any case aborted by any special line of treatment, though Nature does abort pneumonia as she does other infectious diseases is a well known fact. I have seen pneumonia with positive symptoms, subjective and objective; I have seen them with perfect consolidation and have seen those same patients perfectly well in seventy-two hours. Nature does that, but I have never attributed it to any special line of treatment instituted. I know that such claims are made for the salicylates, the bromide of potash and ergot. I doubt if any line of treatment influences this matter in the slightest.

One point that Dr. Bruce emphasized, and I wish to emphasize it further, is this: we are apt

to pay too much attention to the temperature in pneumonia. The temperature, unless accompanied by aggravating nervous symptoms should not be much considered. It is not the high temperature for a short period, but the high temperature for a long, continued period that produces a burning up of the parenchymatous tissue of the organs of the body. If this high temperature only lasts for four or five days it is not capable of producing much degeneration in the body. It is not like typhoid fever where we have a high temperature for two or three weeks.

The only organ that you should watch in pneumonia is the heart. Many of you have seen cases of valvular disease of the heart that have stood pneumonia well. You have seen that in the larger men pneumonia is often fatal, in fact it seems the larger the man the less chance he has of recovering from pneumonia. The whole thing is in supporting the heart. Of the heart stimulants strychnine plays the best part. I do not think that we should wait until the heart begins to fail before beginning strychnine. Digitalis and alcohol are not only indicated, but are of some benefit. We may do a great deal of harm with digitalis in these cases unless you use in conjunction with digitalis nitroglycerine or some of the nitrites. You are liable to produce a collapse from digitalis unless well protected.

There is one remedy that Dr. Bruce did not mention, and one of no little value, and that is camphor. I think it is an excellent stimulant given hypodermically in oil and it is capable of stimulating the heart sometimes better than any remedy we can use. It is a transient stimulant and must be given frequently to get marked results from it.

As to the use of morphine in the beginning of the disease, I think it is undoubtedly indicated. It seems to lessen the shock of the infection. It strengthens the individual and it certainly is indicated and should be used. It can be given hypodermically or in the form of Dover's powder and in pneumonia we get better results from Dover's powder than from any other form of opiate. Every case of pneumonia is an individual case. No special line of treatment is indicated in any two or three individuals. Watch the patient and treat the symptoms. We must treat the disease symptomatically. There is no specific. The whole treatment is in treating the symptoms as they arise, watching the heart from start to finish.

Dr Wiedner: I, as the rest of you, have enjoyed Dr. Bruce's paper very much. I did not know that it simply pertained to the treatment and I shall only make a few comments. I commend most everything he said as to the management of the disease. I take exceptions to some

points that he brought out. As to the open-air treatment I do not think it is wise for us to follow it. We have in pneumonia a condition in which the patient is in need of support and protection in every way and I do not think the patient ought to be subjected to cold and depressing conditions. I do not believe that we can give him the proper protection on a roof in using the bed pan that we could in a room with the window open. In these cases I take exception to the open-air treatment.

As to the hygiene, of course that is most important; we ought to keep the room cool. I have kept all of my patients in a cool room at a temperature of nearly 60°. This is easily enough done by keeping the window open. The air ought to be kept pure. As to the other treatment, the doctor has given a beautiful exposition of the management.

I take one exception as to the alcohol treatment. I used to use a great deal of it. I suppose most of you did. I follow the treatment that gives the best results. I am like Dr. Boggess in advocating the use of camphor instead of alcohol. I also use caffeine. These do just as well as alcohol. Alcohol administered for a few days is followed by relaxation while caffeine and camphor are not. Digitalis and digitalin must be used. Strychnine is a great whip in extreme cases. I do not know of but one remedy that will take the place of the old therapy. Where the heart is overburdened, where the right side of the heart is overburdened, where we have a robust patient and cannot do a venesection we can bleed the patient into his own vessels. Nitroglycerine is the remedy. Keep the bowels open. I sanction the injection of saline solution into the colon. It stimulates the function of the kidney which is of great value.

The mortality from pneumonia as the doctor indicated has been very great. I find that the statistics place the mortality from four to five per cent. to fifty per cent. In young children and in old age it is always a dangerous disease. So it will be a fatal disease in drunkards, diabetics and in patients suffering from kidney disease and arteriosclerosis, but in people of middle life, otherwise healthy, pneumonia should not be so fatal. I want to be excused for drawing attention to the point of over medication. We reach the high mortality of fifty per cent. in the large hospitals of the country where they use the remedies which the doctor has advised not to use.

I do not believe that we need to treat the fever. Perhaps it stops the production of the toxins and maybe it effects the germs itself. Of course hyperpyrexia long continued is bad. In this disease we do not pay much attention any more to the fever. I use an ice cap to the

head and chest or a wet cloth. I state what my experience has given me clinically. It relieves the fever sufficiently to make the patient comfortable. It is indicated early and relieves the pain and the nervous symptoms. We often do harm with other antipyretics especially the coal tar products.

I have always been a skeptic in the treatment of pneumonia. Speaking of abortive treatment, I do not believe in abortive treatment in the fullest extent. We do not see our cases early enough. But is it not possible after all to influence the course of the disease? Is it not a possibility? We know that it is a germ disease; we know that it does produce certain symptoms in the lungs. If we find something that will lessen the development of the germ, something that will make the soil more unfavorable, would it not be possible after all to abort the disease? Nature does this in some instances. On the other hand if Nature has a bad body to deal with, may there not be a less virulent germ, and may not the disease take a favorable course? There is one remedy that I have used with excellent results and that is the carbonate of creosote given in dram doses every three hours in hot milk.

Dr. Bailey: I wish to introduce and ask the privilege of the floor for a member of the State Society who has come here to live—Dr. Sargent.

Dr. Sargent: I am very glad to have the pleasure of hearing this paper and the privilege of discussing it from the standpoint of the country physician. I believe that in the extremes of life pneumonia will always have a high mortality and the death rate will be the same under any treatment, but in the fully grown and middle aged, the working, wage-earning class, I believe we get better results in the country than you city doctors do, though we do not know so much about bacteria. Now, in the city a great many people lead an unsuitable life; they are over fed. In the country we have the same class who are over rested. I believe that the difference in material will account for the difference in results. I believe that the constant use of alcohol is a very important factor in the high death rate from pneumonia. I believe that the people in the country are more temperate than the average citizen of the metropolis.

I must disagree with the essayist in the treatment of pneumonia. I believe that the use of morphia and atropia in the beginning of the disease is dangerous. I believe it is dangerous to the heart to give large doses of morphia at any stage of pneumonia. As long as you have any hope of getting the patient well do not take his chance of recovery by benumbing his symptoms and locking up the secretions within the body. Quinine in my experience has given good results. A calomel purge followed by salines should be given. The diet should be light and

nutritious. I believe the temperature ought to be controlled if possible. In controlling the temperature I have gotten good results with the cold pack.

Dr. Zimmerman: In the main I agree with what has been said here, especially in regard to overmedication. The first case of pneumonia that I treated was in the City Hospital here, and I awoke to the realization of the fact that I was trying to use all of the cardiac stimulants mentioned in our text books and by all of the professors of materia medica who had lectured on that subject in the school. I went to my ward one morning and picked up the chart and found that the patient was getting six drugs. I began to take them away from him as quickly as I could to protect his own interests and after that I treated my patients there with practically no stimulants at all. I relieved the pain with morphia and met the complications as they arose. Since then I have been very careful of employing stimulants unless there was some indication for them.

I beg to differ from the essayist and one or two of the gentlemen who have discussed the subject is that the heart is the only organ to watch; I think we should say that the whole cardio-vascular system should be watched. We should watch very carefully the blood pressure. We are all familiar with the early appearance of cyanosis in this trouble, even when the heart is apparently performing its functions well. This is the result of capillary paresis and if you use strychnine you will find a heightened blood tension. If you should, in a case of this kind, administer alcohol in the form of whiskey, or in the form of French brandy, you will lower the arterial tension, we will render the capillary stagnation all the more and we will place an additional burden on the heart in that it will have to pump the blood through these vessels. On the other hand, where this cyanosis and dusky appearance does not come on until you have noticed evidences of cardiac failure in the pulse becoming rapid, we then have a cyanosis due to cardiac failure and dilatation of the vessels. The use of alcohol will materially lessen the burden of the heart. In the cases where there is duskeness without any material failure of the heart. I do not believe that stimulation is ordinarily indicated. If due, however, to a failing heart—to dilatation to the right ventricle then undoubtedly a vasomotor dilator would be indicated. I cannot favor the treatment as outlined by Dr. Boggess in these cases. I believe that in these cases cardiac weakness is due to a weak right heart and that venesection gives us the best results.

As to the use of the bath, I believe that it does good in many cases, particularly in con-

trolling the delirium which makes its appearance early in these cases where the temperature is high and there is a full bounding pulse. Undoubtedly a part of the delirium is due to the high temperature.

In this connection it is well to give the results in the London Hospital where a series of cases were treated by the quinine method and attended by a mortality of forty per cent. Others were treated on the expectant plan with a mortality of 25 per cent., while those treated with cold baths with the reduction of the temperature by bathing, sponging usually, had a mortality of 14 per cent.

Dr. O'Connor: I realize fully the mortality from pneumonia, but I think there was one statement made that should be challenged—that is, that the mortality of pneumonia is higher than that of tuberculosis. There are many conditions of the lungs that are considered, diagnosed and termed pneumonia that cannot be classed as genuine lobar pneumonia. I recently had occasion to investigate the mortality of these two diseases and I think we are justified in saying that the mortality of pneumonia does not exceed 9 per cent. of the total, while the mortality from tuberculosis ranges from 14 to 18 per cent. For various reasons many cases of tuberculosis are not reported to the Health Department. I think the statement from the Health Office that physicians would be caught up with, who did not report tubercular cases to that office, on receipt of the death certificate of tuberculosis, is probably causing a good many death returns from pneumonia at the present time. I believe we should look more carefully to accurate statistics in the future, and make more exact and honest death returns to our health boards. Ordinary statistics may bear out the mortality rates quoted by the essayist, but post-mortem and other reliable statistics will show that only between 8 and 9 per cent. of the total number of deaths can be attributed to lobar pneumonia.

Dr. Frank: I would like to read some statistical reports. We find the mortality from pneumonia in the Massachusetts General Hospital and Johns Hopkins Hospital from 10 to 25 to 30 per cent. as compared with the German army statistics with a death rate of only three per cent. Louisville has a mortality from pneumonia of nine per cent.

Dr. A. T. McCormack, Bowling Green: It is a pleasure to be here and hear the paper and the discussion on so interesting a subject as pneumonia. In my own practice, in those cases which are able to afford the luxury of two or three capable nurses, I prefer the administration of small doses of digitalin and aconitia, repeated at short intervals, keeping the pulse be-

low 100 and of good quality, as recommended by Delafield. With this are, of course, to be used the hygienic measures detailed by the essayist and elaborated by Dr. Boggess and others.

I believe that we country doctors have an advantage in the "simple life" of our patients.

Dr. Fleischmaker: I would like to bring out one point that has not been mentioned and that is the diminution in intensity of the pulmonary heart sound as showing a failing condition of the heart. I think when that sound becomes indistinct it is a good idea to push the heart stimulants. I would like to emphasize the hypodermic use of camphorated oil. I have seen it used and have used it myself with good success in these cases to tide them over cardiac collapse.

Dr. Ehrlich: I would like to say a few words on account of my intimate connection with Dr. Baruch, from whom I have gotten some ideas of hydrotherapy that I could not have gotten elsewhere. I think that water is one of the most successful agents we have in the treatment of pneumonia. In my hospital experience, and I have had very little experience with pneumonia outside of hospitals, I have used calomel a good deal. I give it in large doses and continue it simply to keep the emunctories open. I also used hydrotherapy. You remember the rationale of the cold sponge or the cold sheet. The cold sheet is put on and over this a light blanket. The shock from the cold first causes a contraction of the cutaneous capillaries. After this the evaporation from the sheet causes a dilation of the superficial vessels, thus establishing a to and fro circulation. When sponging is used the friction takes the place of the evaporation and brings about this reaction to the cold shock.

Dr. Bruce in his paper has mentioned the use of cold of 50 degrees. I have never seen Dr. Baruch give a bath at this temperature. The water is usually at a temperature of 70 degrees. Fifty degrees is very cold and 70 degrees to a patient with a temperature of 104 or 105 is quite cold enough. Now, another thing about reducing the temperature by cold sponging. If we take a patient's temperature and give him a sponging we will find that the temperature will not be much reduced because the former partakes of an external surface and latter of an internal surface.

Another point that Dr. Weidner brought out is the use of the carbonate of creasote. I have seen that given with good and happy results.

Many of us make this mistake in these patients of overlooking the abdomen. We often find a good deal of flatus and this pressing upon the diaphragm embarrasses the action of the heart and lungs. Creosotal will act as an intestinal antiseptic and lessen the formation of this flatus, even though it may have no other action.

As to what Dr. Zimmermann says about cyanosis, if cold water is applied early and applied properly we will rarely see any cyanosed cases. The cyanosis is the result of vasomotor paresis and cold water is probably the greatest tonic we have to the vasomotor system.

Dr. Leavell: Just one or two points in regard to elimination and stimulation in pneumonia. I believe that elimination is often neglected in these cases. Elimination by the bowels and kidneys affords a great deal of protection in these cases. We know that we eliminate poisons in that way, not only that, but the congestion in the lung tissue is lessened. We know that the splanchnic vessels are competent to hold all of the blood in the body and by dilating these vessels we take away the blood in the lung and eliminate the poisons. I favor the use of adrenaline chloride in this disease.

As to the use of stimulants, one little point. I believe that many cases are lost in the first twenty-four hours. I believe it is the consensus of opinion that most cases die in the first twenty-four hours. They die of shock and the shock evidenced in pneumonia is not different from shock due to injury of the body. We are apt to overestimate in shock. We are apt to use one drug that does more harm than any other. We use strychnine. I believe that in shock from pneumonia we should use all of the stimulants that we do in shock from other causes. If we use strychnine we are hurling the patient to eternity as fast as we can. I believe that morphine lessens the impressions of shock to the nervous system. We should save strychnine for toning up the heart later. I believe if we will follow this line of treatment we will save more cases.

Dr. Bate: There is just one point upon which, I would like to disagree with a number of the gentlemen. I do not see upon what grounds medication can be given at all if we are to receive no benefit from it. We have some of the most accurate clinicians who claim that they can cut short pneumonia. Some physicians claim to be able to cut it short by large doses of calomel, others by large doses of quinine, others by the application of glycerine to the outside of the chest and still others by the use of normal salt solution in the rectum. Concerning these things, when we observe a patient with prune juice sputum, respiration 50 to 60, pulse 100 to 120, and under treatment there is a sudden subsidence of these symptoms, and clearing up of the rales in the lungs, the respirations dropping to 28 or 30, it seems to me that it cannot be a mere coincidence but must be the result of the treatment.

Dr. Richardson: I believe we will lessen the number of cases and lessen the death rate of

this disease if we isolate the patients suffering from it

Dr. Bruce: I want to thank the gentlemen for the generous discussion of the paper. In regard to bleeding in pneumonia as mentioned by Dr. Boggess, I do not believe that venesection is indicated except in plethoric patients.

With reference to the quinine treatment I would like to ask the doctor if he uses quinine as a routine practice in pneumonia? I think where we give large doses of quinine we run the risk of irritating the kidney and the stomach unnecessarily causing distressing symptoms.

As to the mortality from pneumonia, I think that Dr. O'Connor has not looked into the statistics of the death rate from pneumonia. Seventy-five per cent. of the old people whose deaths are reported as due to senility upon investigation would have been found to have died of pneumonia. More deaths occur from pneumonia in the large cities than from consumption.

C. W. HIBBITT, Secretary.

Mercer. — The Mercer County Medical Society met in the Y. M. C. A. rooms at Harrodsburg, February 12, at 2 P. M., C. P. Price presiding. The following members were present:—C. P. Price, M. H. Sutherland, W. H. Witherspoon, J. T. Price, W. D. Powell, C. W. Sweeney, A. D. Price, T. O. Meredith, C. B. Van Arsdall, Holly Baxter, visitor.

One of the best meetings in the history of the Society was held, two excellent papers being presented and a free and profitable discussion indulged in by the members present.

At the January meeting it was voted to insist on the payment at the same time of county and State Society dues, and this has been done promptly by the active members of the County Society; we are already within three of the total membership for last year.

Dr. J. Tom Price read an excellent paper on "La Grippe," which is published in this issue of the Journal. It called forth a full discussion by every member present. The complications, peculiarities, and treatment were especially emphasized. M. H. Sutherland's paper on "Criminal Abortion" was brief, but well prepared.

Holly Baxter, of Dugansville, was elected a member of the Society.

The next meeting will be held Tuesday, March 12, at 2 P. M., at which time W. Horace Witherspoon will present a paper on "The Causes of Jaundice."

C. B. VAN ARSDALL, Secretary.

Nelson.—The Nelson County Medical Society met in Bardstown March 6, with sixteen members present, and four visiting physicians, as follows:—C. Z. Aud, Cecilian; D. C. Bowen, E-

town; R. B. Gilbert and Jim Irvin Abell, Louisville. Most excellent papers were read by W. Lucien Heizer—"The Relation of the County Society to Public Health;" R. B. Gilbert, "Summer Diarrhoea in Infants," and Irvin Abell, "Hernia." We then adjourned to the Newman House, where an elegant dinner which had been ordered by the Society was heartily enjoyed by all, at the conclusion of which our County Judge Hon. F. C. Daughtry gave a short and well delivered address of welcome to the invited guests and presided as Toastmaster, when the following toasts and responses were made:

"The Surgeon," by Irvin Abell.

"The City vs. the Country Doctor," by R. B. Gilbert.

"The State Medical Society," by C. Z. Aud.

"The County Medical Society," D. C. Bowen.

"The Minister and the Doctor," by Rev. W. R. Anderson.

"The Old Line Doctor," by J. J. Wakefield.

It is needless to say that all of these subjects were interestingly handled and were highly entertaining..

The Nelson County Medical Society extends its thanks to our guests of that day and especially to Rev. Dr. Anderson and Hon. F. E. Daughtry, for the interesting part which they took in our entertainment.

The 6th of March, 1907, will go down in history of the County Society as its banner day.

HUGH D. RODMAN, Secretary.

Oldham—The Oldham County Medical Society met at Beard, Februray 28th, with President John H. Speer in the chair.

Members present were Drs. Speer, Cassady, Freeman, Wallace, Harthill, Pryor and Caldwell.

Officers elected for 1907 were as follows: President, John H. Speer; Vice President, J. A. Freeman; Secretary and Treasurer, Herbert Caldwell. After his re-election Dr. Speer made a very appropriate speech of acceptance at the same time presenting to the society a gavel, around which, for him, many sweet memories clustered. The wood from which it was made having grown at the scene, as he expressed it, "where he won the dearest woman that this world had ever held for him."

Lew G. Wallace was elected delegate to the next State meeting.

HERBERT CALDWELL, Secretary.

Pendleton—The Pendleton County Medical Society celebrated its first anniversary at the home of J. Edwin Wilson, December 12, 1906. H. C. Clark was the essayist for the day and read a most excellent paper on "Hysteria." The doctor brought out many interesting features of this most eccentric disease, and discussed fully the border line between Hysteria and Epilepsy, and

between Hysteria and Insanity. A number of interesting illustrative cases were reported, and the discussion by several members of society was spirited and to the point.

After the completion of the program the annual election was held and the following officers were duly elected, viz: President, W. H. Yelton; Vice President, N. B. Chipman; Secretary, J. Edwin Wilson; Treasurer, T. C. Nichols; Delegate, H. C. Clark, and Board of Censors, W. A. McKenney, G. W. McMillan and Jno. E. Wilson.

P. N. Blackerby and F. L. Peddicord were elected to membership. We now have an active energetic membership and the work of the past year has been of great interest and benefit to every one of us. It took a long time to impress the benefits of society work upon some of our doctors, but now everyone realize the uplifting influence, and the mutual helpfulness to be derived from the intimate association with his brother practitioner.

At our last meeting a resolution that no member of the Society would make a life insurance examination for less than five dollars was unanimously adopted, and in the near future we propose to take up other matters for the betterment of our profession, both financially and scientifically.

J. EDWIN WILSON, Secretary.

Shelby.—The Shelby County Medical Society was called to order February 21, by President W. T. Buckner. Members present:—Drs. Pratt, McMurray, Hawkins, Smith, Lawrence, Yager, W. F. Beard, and F. M. Beard.

There being no papers economic questions were discussed, and the following resolutions were presented by W. F. Beard:

"Resolved, That each member of the Society furnish the Secretary or a committee with the names of all persons in their bailiwick who are omitting to pay their bills or failing to do so the amount of the bill and the length of time of time it has been running and this list be furnished each member if they desire it or a record kept that all members can have access to at any time.

The resolution referred to committee of W. T. Buckner, F. M. Beard, and W. E. Morris to report at March meeting.

The following resolution has been adopted by Society and signed by most of the members:

We, the committee appointed to fix a schedule of fees and to formulate resolutions for the purpose of improving existing professional conditions, beg leave to submit the following:

Whereas, We believe the profession will be much benefitted by educating the public to recognize the fact, that medicine is an exact sci-

ence and not a hit or miss, haphazard affair as many seem to think, and

Whereas, We believe professional conditions will be greatly improved by thorough organization and by establishing closer associations and more intimate relations between the members of the profession. Believing the good resulting therefrom would be to raise the standard of general and individual efficiency to the highest degree; the diminishing of the friction among members to the minimum and where misunderstandings do arise, making possible the re-establishing proper relations with the least harm to the profession and the members involved. This alone would rob the practice of medicine of many of its unpleasant features. Instead of working in the close and stifling atmosphere of jealousy and strife we would breathe the pure, life-giving air of honest competition.

We further believe that by organization and closer relations we can make the sum total of our work aggregate more to us, and

We further believe that our patients will be the beneficiaries by having better medical service and consequently longer lives.

Whereas, We believe the professional conditions will be improved by having a more definite, defined relation with the allied profession of Pharmacy, and

Whereas, We believe a thoroughly organized and properly working county medical society to be the panacea for all the evils existing in connection with the profession. Therefore be it

Resolved, That we, the undersigned members of the Shelby County Medical Society, hereby agree to make the county society a center of professional advancement and co-operation; to improve the standard of general and individual efficiency; and a medium for the elimination of all misunderstandings and the establishment of harmonious and friendly relations between all its members.

Resolved further, That we adopt the following schedule of fees as the established minimum price for service.

Regular Visits, \$1.50 within first mile, and 50c for each additional mile or fraction thereof.

Night Visits, same as day visits, and \$1.00 additional.

Office Consultation, \$1.00.

Telephone prescribing, 50c.

Consultation, \$10.00 in radius of three miles and 50c for each additional mile.

Obstetrics, normal cases, \$15.00.

Forceps Cases, \$20.00, additional.

Gonorrhoea, \$10.00 per month.

Syphilis, \$20.00 for first month's treatment, and \$5.00 for each month thereafter.

Fractures, arm and forearm, \$15.00.

Fractures, leg \$25.00, and charge each visit at regular fee.

Fractures, bones of foot or hand, \$5.00.

Fracture of ribs, \$5.00.

Fracture of bones of face, \$10.00.

Dislocations, shoulder, elbow, knee, ankle and wrist, \$10.00; hip, \$20.00.

Amputations, arm, forearm, foot, leg, hand, \$30.00; hip and shoulder, \$50.00; fingers and toes, \$5.00.

Insurance Examinations, \$5.00.

Resolved further, That we will provide ourselves with, familiarize ourselves with and be governed by the precepts taught in the Code of Ethics of The American Medical Association both in our relations with the public and our relations with each other.

Resolved further, That should there arise, because of misrepresentations, or a different interpretation of the code, or for any other cause, a strained relation with any other member, that we submit our respective claims to a properly appointed committee or jury for adjudication, binding ourselves to be governed by their verdict.

Resolved further, That by means hereafter to be determined we establish more satisfactory relations with the members of the allied profession of Pharmacy.

Resolved further, That we devise some means of establishing mutual protection against those who are able to pay, but unwilling to do so.

Resolved further, That we make an effort to create in the public mind a higher appreciation of the profession and endeavor to establish recognition of the fact that "Medicine" is an exact Science. Accomplish this by demonstrating the fact that thousands of lives are being saved annually by the application of strictly scientific principles in the prevention of disease; and that other thousands are being saved by applying exact knowledge to already existing diseased conditions. Point out the noble and self-sacrificing devotion of some of our leading men which makes these results possible. Rob the "healing art" of that mysticism and superstition which cling to it, because of its birth during the reign of ignorance, establish it on the solid foundation of Science and Rationalism.

Resolved further, That our attendance at the regular meetings will be as constant as circumstances will permit, and that there will be no attempt to evade any tasks imposed upon us. All of which is respectfully submitted.

Members signing: T. E. Bland, R. D. Pratt, T. J. Howe, E. L. Branaman, J. F. Jesse, W. E. Morris, Geo. H. Yenowine, J. L. Eggen, F. M. Beard, S. L. Beard, C. Yager, W. P. Hughes, J. Perrin, Graham Laurence, E. B. Smith, J. W. Snyder, T. S. Shous, T. J. McMurray, G. A. D. Brown.
S. L. BEARD, Secretary.

Trigg.—The Trigg County Medical Society met in the office of H. Blane, February 13th,

1907. Present, W. W. Richmond, Clinton; S. E. Standrod, C. L. Broadus, Clint Hayden, J. H. Lackey, W. H. Jefferson, Henry Blane, Maury Anderson, J. W. Crenshaw, and Homer Blane. The President, Dr. White, being absent, and the Vice-President, S. E. Standrod, not feeling well, J. W. Crenshaw was called to the chair, stating the object of the meeting and making a few timely remarks regarding the value and necessity of county organization and the great good the State, and American Medical Association are now doing. He introduced Dr. Richmond, Councilor of the first district, who delivered an excellent and most instructive address, emphasizing in clear and well-chosen words the importance of perfect medical organization and demonstrated thoroughly the advisability of standing together. J. H. Lackey responded, indorsing all that was said, and assuring Dr. Richmond that we were very glad to have him with us, and much benefit will be derived from his visit. The election of officers for this year resulted as follows:—President, J. W. Crenshaw; Vice-President, C. L. Broadus; Secretary and Treasurer, Homer Blane; Censors, Henry Blane, S. E. Standrod, W. H. Jefferson. Drs. Hayden and Anderson were elected to membership. A motion was unanimously adopted that the members of this Society bind themselves not to make examinations for any old line insurance company for less than the minimum fee of \$5.00 and the President and Secretary obtain the indorsement, if possible, of the other physicians of the county to this agreement. The following members were appointed to read papers at the next meeting:—Clint Hayden, "La Grippe;" C. L. Broadus to open discussion, J. H. Lackey, "Eclampsia," Homer Blane to open discussion; Maury Anderson, "Treatment of Fracture," S. E. Standrod to open discussion. There being no further business the meeting adjourned.

HOMER BLANE, Secretary.

Woodford.—The Woodford County Medical Society met in regular session on Tuesday, the 5th of March, 1907, present, Drs. Worthington, Vice-President; Crenshaw, Hart, Markwell, Parker, Phelps, Risque, and Stedman. Dr. Worthington presented the following preamble and resolutions, which, after due consideration, were unanimously passed:

Whereas, In refilling prescriptions for opiates, cocaine, chloral, sulphonal, trional, veronal, bromides, acetanilid and its compounds, and other habit-forming drugs, without the consent or advice of the physicians who write the said prescriptions, the public suffers an injury, and the physicians an injustice, by being thus caused to be credited with instrumentality in the formation of habits for which he is in no way responsible. And,

Whereas, The present custom of refilling and dispensing prescriptions to persons for whom they are not specifically written, is usually a detriment both to the persons who so use the said prescriptions, and the physician who wrote them. And,

Whereas, The common practice of druggists in themselves prescribing for gonorrhoea, syphilis and other venereal diseases—either from personal knowledge of these diseases or by the use of physicians' prescriptions that have come into their hands through other cases similarly affected—tends to make the cure of these cases more difficult, and in many instances absolutely impossible, thus enabling gonorrhoea (to say nothing of the injurious effects of the other disease) to become the direful source of

1st. Seventy per cent. of all abdominal operations performed on women.

2nd. The cause of life-long suffering in ten times that many others for whom no operation can be obtained; and,

3rd. The origin of other manifold dangerous and inveterate evils—including one-fourth of all the blindness in the world—which evils, in the aggregate, inflict greater injury on mankind than any other disease, not excluding the Great White Plague, and,

Whereas, The above statements are not assertions, but sheer truth, abundantly verified and incontestably proven. Therefore, be it resolved,

1st. That the attention of the Druggists of Woodford County be called to these evils which they, for the most part unwittingly, are assisting to inflict on the physicians and the general public by their present customs, and that they may not longer, through lack of knowledge, assume responsibility in matters of so grave and far-reaching consequence.

2nd. That a type-written copy of these resolutions be sent each druggist, or firm or druggists in Woodford County, making the filling of prescriptions a part, or a whole, of their business, and that such copy be sent to every physician in the county, not present at this meeting.

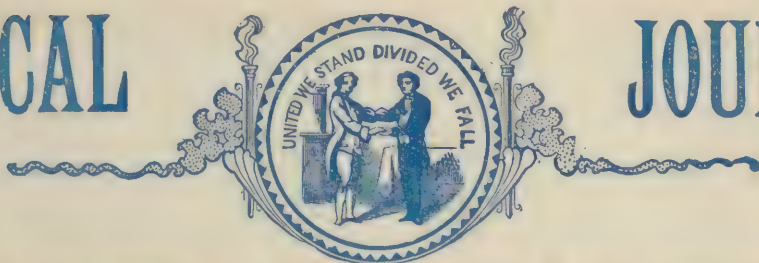
3rd. That we extend to all the druggists of Woodford County, assurances of our past and present esteem and confidence, and of our sincere desire that it shall not become necessary in Woodford County for the physicians to take the business of filling prescriptions entirely into their own hands, as is fast becoming the custom elsewhere, by reason of the conditions set forth in the preamble to these resolutions.

4th. That this Society deems it a duty, both to itself and the druggists of Woodford County, to ascertain the attitude which each druggist, or drug firm will in future hold regarding the sub-

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No. 4.

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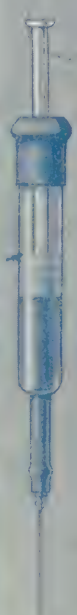


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MAY, 1907.

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MUST THE DOCTORS AND DRUGGISTS PART COMPANY?

The action of the Woodford County Medical Society in regard to drug store abuses, reported in our last issue, is both timely and significant. Many years ago the almost universal practice of systematic substitutions, duplication of prescriptions and of prescribing over the counter, especially for venereal diseases, by even the more reputable pharmacists, drove the profession of Europe to the habit of dispensing drugs from the office. Except with country practitioners, and in a few cities and towns where these evils were deemed intolerable, this practice has not come into general use in this country. In recent years these abuses have grown so rapidly and have become so gross and blatant as to seriously raise the question as to whether or not we have come to the parting of the ways with our drug friends.

Almost daily we read in the newspapers guarantees from leading druggists of the cure of the most complex diseases, of which they know nothing, by means of nostrums of which they know less, except that their chief ingredients are cheap alcohol and dope, and the claims for which they know and we know are false and fraudulent. Boys and young men ignorantly are mischievously encouraged in vicious living, mistreated and misled, and the health and lives of their future wives are endangered to an extent which makes it a great public problem. And as if to emphasize the extent to which this once honorable vocation has become commercialized and debauched, the nostrum manufacturers, reeking with recognized crime and fraud, were able to marshal both the wholesale and retail druggists

almost solidly against the national pure food bill, just as they are now doing against similar legislation pending before the various state legislatures.

This is a most important problem. Many of us have grown so accustomed to writing prescriptions that it has become a fixed habit, and only a sense of duty to our patrons and the profession will force us to dispense our own drugs. However, existing conditions, insulting to the profession and still more dangerous to the people, are intolerable. We can live without the druggists, with colony offices, with tablets, triturates and other modern conveniences in dispensing, as our homeopathic and eclectic brethren have always done, and it seems that the druggists have made up their minds to live without us. It is evident that it is soon to become a distinct issue, and in view of its importance to us, the druggists and the people, we suggest that it be made a special topic for discussion in each county society for June, or some other early meeting, and that the conclusions be reported to the JOURNAL. It is also suggested that conferences be arranged with the druggists wherever there is promise of good results from such action, that especial attention shall be given and report made as to the stand the druggists of the county will take in regard to any legislation which may be proposed looking to the restriction of the sale of habit-producing nostrums. We think it far better to come to terms with the druggists if it can be done with justice to ourselves and the people, and the conferences should be undertaken with this end in view, but the gravity of the situation should be fully appreciated on both sides, and it should be plainly and frankly made known that existing conditions can not continue. We hope to hear from each county society in Kentucky.

THE ORGANIZATION

Our readers will hardly be surprised at the various and vicious attacks being made on medical organization by the organs of the various nostrum makers. Now that we are beginning to accomplish something by our propaganda against frauds in or out of the profession, we must not be surprised to find that "the hit dog hollers." You may expect your mail to be filled with pamphlets, letters and circulars, and with clippings from the venal and subsidized portion of the medical press, telling about the alleged outrages completed or contemplated by the A. M. A. They will prate much about "independence," and "a machine," all a cheap and patent attempt to persuade our profession to continue to be the dupes of the nostrum owners. An attack on the Kentucky State Medical Association is an attack on every county society in the State. Every doctor in Kentucky knows, or may know if he reads the JOURNAL, exactly how every cent of their money is spent, and that not a nickel is expended except after a vote by their duly-elected representatives, and on a voucher signed by three of the duly-elected officers which is kept on file for exhibition at each annual meeting and which absolutely itemizes every single expenditure. The same system is used by the American Medical Association, and not one cent has ever been expended in the publication of its great journal, or the conduct of its diverse departments for which a receipted voucher check is not on file in Chicago. Its trustees are elected by delegates selected by the State Associations. A paper or journal attacking a body composed of such men as Welch, Billings, Marvel, Grant, Porter, Johnson, Wright, Montgomery, Harris, Happel and their fellows, but stultifies itself. Nothing in our great profession is greater than to see such men devoting their time and energy to the active management of our great National organization, *without compensation*, after their selection by our representatives.

The physicians of Kentucky, individually or as a body, are as free and independent as the air they breathe. No machinations or combinations shall ever deviate them from the paths of professional harmony, unity and usefulness which are their objects. Least of all shall they be persuaded again to use or prescribe nostrums or worthless proprietaries by any combination of their soulless manufactures with the purchasable element of the so-called *independent* medical press.

THE NEXT LEGISLATURE.

Bills have been introduced in nearly all of

the state legislatures now in session to conform the statutes to the national Pure Food Law, and in every instance powerful lobbies, led by the nostrum interests, and backed by the local wholesale and retail drug trade, have swarmed into the state capitols to work against the legislation. As it is probable that our legislature will be asked to take action for the protection of our people from impure foods and habit producing drugs it is important that our friends, lay and professional, should take up the matter with their candidates for both the House and Senate when they ask for your support. This should be taken up systematically in every county.

VIAMI.

Elsewhere in this issue we publish from the virile pen of the distinguished editor of the *California State Journal of Medicine* an expose of the viami outfit. Samuel Hopkins Adams paid his compliments to the same set in his "Great American Fraud" articles as follows: "Various publications, lecturers, renegade physicians, hospitals and institutes fatten parasitically on the vested interests of quackery. A fake concern, called the Viami Company, which preys on impressionable women, has organized an elaborate "lecture bureau," mostly women and clergymen, to spread its doctrines, the chief of which is that every woman has something wrong with her, and that whatever it is, Viami preparations alone will cure it. A Chicago woman, who received an invitation to one of these lectures, through a friend, lays bare the whole 'game' in a few sentences: 'After the lady lecturer finished her course it became evident to me that there was *no one* present who was exempt from the need of "Viami," from the actions and words of the lecturer, and also, I am sorry to say, from the words of the ladies.'

The same old "skin game," get your victim to worrying and she'll buy your medicine. "Viami Hygiene," of course, is based on the fallacy of diagnosing and treating by mail."

These preparations by which it is claimed that practically all diseases may be cured and conception, among other things may, be prevented, and, at the same time, sexual desire stimulated, are composed largely of yellow root. It is suggested that physicians call the attention of the newspapers to this exposure. These people have usually worked the "church racket" subsidizing some low grade preacher and then furnishing steady employment at a small commission to some of the "widows and orphans" of the church for peddling their wares.

A. M. A.

The American Medical Association is the largest and greatest professional organization in the world. More doctors attend its sessions than any medical society in any other country. The coming meeting at Atlantic City promises to be the most interesting meeting yet held. A month from the day you receive this number of the *Journal* six or eight thousand medical men will be starting toward this year's medical Mecca. In its different sections papers and addresses of interest to every one in attendance will be read by the leading teachers and practitioners from every part of the country. The total expense from any part of Kentucky need not exceed forty dollars for the trip to Atlantic City and return. A splendid delegation from Kentucky will go over the B. & O. Railroad. All of us going together, we will have practically an extended scientific session from Louisville through Indiana, Ohio, Pennsylvania and New Jersey. Lay aside your professional engagements and join us! Dates and full particulars will appear in the next *Journal* which will reach you in ample time to join the party.

"INDEPENDENT."

The way some of the medical journals which are owned and operated by nostrum manufacturers, or whose editors or owners are subsidized by them, are howling, now that the Council of Pharmacy and Chemistry of the A. M. A. is really exposing their methods and objects, we doctors are getting suspicious. If the "independent" journalism these commercial sheets talk about so much is intended to denominate them as independent of everything for the welfare of the doctor and his patients they are welcome to so classify themselves. Our owners and supporters are the medical men of Kentucky to whose every utterance these columns are open. Watch the free journals and pamphlets coming to you in every mail and you will be reminded that they, too, are controlled by their owners and supporters, the dope manufacturers and their allies and employees, and that their columns, editorial and advertising, are filled with the unctuous or vicious, as the case may be, self-laudatory or anti-medical diatribes of their angels. If such is to be the meaning of an "independent medical journal," the *Kentucky Medical Journal* feels that it is fortunate in being *dependent, absolutely dependent* on the united medical profession of Kentucky!

THE CITIZENS LIFE.

The members of this Association all over the State take particular pride in the fact that all of the Louisville insurance companies are loyal to its insurance fee resolution and provide the fee of \$5.00 for each complete examination. Especial credit is due Dr. T. Hunt Stucky and the Citizens Life, the oldest and largest Kentucky company, as they had been paying the full fee for many months before the Owensboro session. The physicians of Kentucky appreciate the action of the Citizens Life and take much pride in its success.

ANNUAL DUES.

The Council has authorized the Secretary to waive the constitutional provision which suspends Societies which have not paid their annual dues by April 1, for ninety days. Secretaries will govern themselves accordingly, and will please collect dues from every member and forward them to the State Secretary as soon as possible. Members are urged to pay their dues to their County Secretary the day they read this notice.

SCIENTIFIC EDITORIALS.

EPIDEMIC CEREBRO-SPINAL MENINGITIS—(SPOTTED FEVER.)

BY CARL WEIDNER, LOUISVILLE.

The recent epidemic of cerebro-spinal meningitis in this State suggests a brief review of the later researches in this disease. It was first recognized as a definite disease by Vieussieu, of Geneva, in 1805. A year later it occurred in Medfield, Mass., then in the form of an epidemic in the New England States, States, Maryland, Pennsylvania and Canada, and prevailed until 1816. Then successively in France and Germany, and within the last thirty years it has occurred epidemically and sporadically in a number of places. Among the more violent epidemics were those in Boston in 1847, in Lonaconing, Md., in 1892; in New York, in 1893, and two of the most severe epidemics occurred in Germany in 1894-95 and 1896 in the mining districts of Silesia and Westphalia.

Winter and spring have always been the favorite seasons. It is most prevalent in children and young adults.

The *Symptoms* and the clinical course vary greatly in different cases and in different epidemics. The main symptoms are chilliness, headaches, restlessness, insomnia, repeated projectile vomiting, delirium, then stupor to

coma, with or without convulsions. A marked symptom is rigidity of the muscles at the nape of the neck and spine, causing retraction of the head and back and severe pain on trying to bend the head or body forward. Opisthotonus occurs in many cases. About the third day Herpes and hemorrhagic spots or blotches occur in a large number, the latter giving origin to the synonym "spotted fever." Hyperaesthesia, later anaesthesia; absent knee-jerk; Kernig's sign, consisting in inability to extend the leg upon the thigh beyond an angle of 130° , while in the sitting posture. Leucocytosis is marked. Fever is moderate, 100° to 103° F., but often high fever by complications. Pulse is fast and full, later slow and irregular. Respiration is irregular and often Cheyne-Stokes type. The pupils become dilated and often irregular in size. The urine contains albumin and may be retained; constipation is common and the belly retracted. The finger-nail drawn across the skin leaves a red line—*tâche cerebrale* of Trousseau, showing vaso-motor disturbance. Signs of pulmonic congestion or pneumonic conditions occur in many cases.

The Duration varies from one day to three or more weeks. Often there is an intermittent improvement and then relapse and death. Paralysis of various cranial nerves occurs from extension along the sheaths.

Pathological anatomy. The principal changes are in acute inflammation of the arachnoid and pia mater, of both brain and cord, with sero-fibrinous, sero-cellular or sero-purulent exudation into the subarachnoid space. Distention of the ventricles may occur later on. The inflammatory process extends along the cranial nerves and cerebral and spinal ganglia. Changes in other organs have been found pretty constantly. The lungs show small broncho-pneumonic areas or more extensive consolidation, as in croupous pneumonia; the spleen is enlarged in most cases; the kidneys and liver show degenerative changes and congestion and hemorrhagic and purulent foci are not uncommon in the pericardium, myocardium, the skin and intestine. Naso-pharyngeal inflammation is also found.

Etiology: Until recently there has been a great deal of confusion as to the specific cause. In the sporadic form of the disease quite a number of micro-organisms have been found, prominent among them the pneumococcus, streptococcus and staphylococcus, influenza-bac., colon bac., typhoid bac., tubercle-bac., actinomyces, etc. Stengel states that the pneumococcus is the cause of 60% of sporadic meningitis. In 1887 Weichselbaum discovered in the spinal fluid of six patients with sporadic

cerebro-spinal meningitis the germ named by him the *meningococcus*, a germ morphologically similar to the gonococcus, not staining by Gram's method, growing sparingly upon culture-media at 37° C.; and which showed no growth at ordinary room-temperature and had very little resistance to dryness and heat. It grows best in the presence of native albumin. On aseptic agar colonies develop in 24 hours, gray, translucent, slightly elevated, 1.5 to 4 mm. in diameter and simulating a fresh drop of clear starch paste. On transillumination the colonies appear light-yellow, homogeneous and with a smooth and slightly wavy border. This diplococcus is located within the protoplasm of the leucocytes, not in the nuclei. Heubner for this season introduced the name "*micrococcus intracellularis*."

Weichselbaum recognized many cases of primary meningitis also due to the pneumococcus, and Heubner and Leichtenstern pointed out the frequent occurrence of this germ in sporadic forms or in cases accompanying pneumonia, but they denied its presence in the epidemic form. Jaeger in 1895 and Heubner a year later cultivated a germ corresponding in the main, but not entirely, with that described by Weichselbaum, from the fluid obtained by lumbar puncture in epidemic cerebro-spinal meningitis and thus the question of etiology again became obscured. Subsequent research by Weichselbaum Albrecht and Ghon, Councilman, Mallory and Wright, Osler, Bettencourt and Franca verified Weichselbaum's original assertions. The most positive proof of the specific effect of the meningococcus, however, was furnished during the last German epidemic in 1895, where the principal investigations were made by v. Lingelsheim, Westenhoeffer, Flügge, Kolle, and Wessermann, Ostermann and others. v. Lingelsheim found the typical meningococcus in the lumbar fluid taken during the first few days of the disease in 73% of cases examined. In 31 post mortems he succeeded in all of them in proving its presence by the culture-method, in the majority in pure culture, in others accompanied by another plumper coccus, which he named the diplococcus crassus. (Westenhoeffer.—Berl. Kb. Woden No. 39 and 40—1906) Councilman, Mallory and Wright found and cultivated the meningococcus 38 times in 55 cases from the spinal fluid.

Previously attention had been drawn to the occurrence of the meningococcus in the pharyngeal mucus of patients affected with this disease and V. Lingelsheim proved the presence of the germ in this locality in 93.8% of cases.

Ostermann further proved that persons

coming in close contact with patients with the disease frequently carried the germs in their throats and thus may act as "carriers" and transmitters of the disease to susceptible persons. This would explain many hitherto obscure points in the spreading of the disease. Among 24 healthy persons, members of families in which the disease prevailed, he found the meningococcus 17 times in the pharyngeal mucus. Some of these suffered with a slight specific pharyngitis. Extensive investigations by Westenhoeffer and Meyer verified the existence of naso-pharyngeal inflammation in most cases; the former considers the nasopharynx the primary point of entrance for the germ. From this locality they may reach the meninges either by the lymph—or blood stream. He also considers patients with the lymphatic state as most susceptible—90% of the patients in the Silesian epidemic were under 15 years old. The meningococcus has also been found repeatedly in the blood both during life and post mortem.

Elser (Jour. of Med. Research 1905) reports results of study upon the bacteriology of epidemic cerebro-spinal meningitis. In 130 cases he found the meningococcus (Weichselbaum) 109 times; he isolated the germ from the blood 10 times in 41 cases, using ascitic fluid 1 p. and bouillon 2 p. as a culture medium. All of these had been previously diagnosed by lumbar puncture. Seven of these ten died and Elser considers the prognosis bad when found in the blood. In 26 post mortems he found the meningococcus 14 times in 17 examinations; he also verifies the existence of lymphatic enlargement and considers it a predisposing factor to the disease.

G. Canby Robinson (Am. J. Med. Sci. April 1906) in a study of 15 cases isolated the meningococcus 14 times from the spinal fluid; once in four times from the blood and in one case from a purulent conjunctivitis. Goodwin and von Shally (Am. Jour. Med. Sci. Jan. 1906) give the results of bacteriological examination of the nasal cavities of persons suffering with epidemic cerebro-spinal meningitis and of persons coming in close contact. The meningococcus was present in the nasal secretions of 50% of patients examined in the first two weeks—and in 10% of healthy persons in close contact with the cases. *All these numerous findings, together with specific agglutination of the meningococcus by serum of the patients, hardly leaves any room for doubt that the meningococcus of Weichselbaum is the specific cause of Epidemic Cerebro-spinal Meningitis.*

Lumbar Puncture (first done by Quinke in

1901) offers a most important means of diagnosis. It is important in every case to determine by microscopical and bacteriological examination the character of the exudate and the nature of the infective organism. This knowledge is useful in making prognosis and in the future may be of importance as to the treatment. We can have no specific serum treatment unless we know the specific germ present in each case, for instance the pneumococcus-serum will not benefit meningococcus infection and vice-versa.—

Prophylaxis and Treatment: In the light of our present knowledge the preventive treatment ought to include, 1, official notification of the health officer; 2, isolation in hospital, both to limit contagion and for better management; 3, prevention of the infection of healthy persons who may act as disease-carriers and rendering the latter harmless by proper antiseptic treatment of their nasopharynx; 4, thorough hygiene of the sick room, including disinfection of clothing, bedding, nasal secretion, sputum, etc.; 5, education of the people as to the nature and danger of the disease.

The Mortality ranges from 50 to 90%. Official reports of the late German epidemic show 1789 deaths out of 3102 cases.

The Treatment, until we find a specific medication, must be, in the main, symptomatic. Whether the specific Serum, attempted by Jochmann, Kolle, v. Lingelsheim, Procter and Flexner will be successful, remains to be proven. Jochmann (of Breslau) at the German Congress for Int. Med. in 1896, reported 17 cases treated with serum (Merck's) with 5 deaths. He used the serum both subcutaneously and injected into the subarachnoid space after previous lumbar puncture. *Purgatives*, either salines or mercurials are indicated early and repeatedly.

Cold to head and spine have been used since the earliest days, to lessen congestion, headache and pain. To relieve excessive restlessness, pain and spasm, *Morphia* has been used since the days of von Fienissen and Stille; *Bromides*, *Antipyrin*, etc., for the same purpose. The *Salicylates*, *Aspirin* or *carbonate of Creosote* in large doses may be used for their antiseptic effect. Favorite remedies are the *iodides* and *iodates* of Sodium, both early and later in the disease. Kollargol, Crede's ointment, has its advocates. In two successful cases in children, occurring in my practice, I have relied upon mercurials, followed by Bromides and Iodides, and the full warm baths with a large pitcherful of ice water poured over the head and neck, repeated every 4 to 6 hours. This was found the

best way to control the almost constant opisthotonus and enable the patients to get rest and take food. The food ought to be light, but nutritious. *Lumbar puncture* constitutes one of the best means to lessen intracranial and intraspinal pressure. 5 to 10 to 50 c. c., are taken away and repeated if indicated. Krönig followed Lumbar puncture with injection of normal Salt Solution. Jakob and Franca used injections of weak Carbolie acid or lysol.

Surgical removal of the exudate seems rational. Kümmel reports a cure of purulent meningitis by trephining at the base of the occipito-parietal junction.

Westenhoeffer proposes drainage, with the view of prevention of hydrocephalus, by trephining in the temporal region and making a counter-opening in the occipital region, with irrigation.

EARLY INCISIONS OF THE DRUM IN ACUTE MIDDLE EAR AFFECTIONS.

BY A. O. PFINGST, LOUISVILLE.

The operation of incising the drum which has unfortunately always been referred to as paracentesis has only in late years taken the place in the practice of medicine it deserves. Just at this time following the prevalence of La Grippe and Measles with a great number of middle ear complications, the subject is one of more than ordinary interest and importance.

It seems strange that this operation now so clearly indicated as a mechanical means of removing pus and other fluids from the middle ear should have been introduced into medicine for an entirely different purpose.

History tells us that it was employed first by a quack doctor named Eli in the Eighteenth Century as a treatment for various forms of deafness and that the profession took it up in the beginning of the Nineteenth Century as a treatment for deafness associated with closure of the Eustachian tube. After a brief period of popularity, the operation fell into disuse and was not revived again until about forty years ago when Schwartze recognized in it a valuable means of removing exudates from the middle ear. After several years experience with the operation, Schwartze sums us the following indications for its employment:

(1). In acute and chronic catarrh of the middle ear with so much exudate as to cause bulging of the drums or when the use of the

catheter causes no permanent improvement in the hearing.

(2). In acute purulent otitis media with delayed rupture of the drum.

(3). In chronic purulent otitis media with a very small perforation, or when the perforation is situated high up, provided symptoms of pus retention appear.

(4). In marked inflammation of the drum accompanied by severe pain.

In addition to these indications the condition of the mastoid bone and the general condition of the patient must be considered in deciding upon opening the drum.

The mistake of delaying the incision too long, thereby bringing about mastoid involvement or deeper complications has undoubtedly been made with much greater frequency than that of undertaking the operation too early.

We might look upon pain, elevation of temperature and bulging of the drum as the cardinal symptoms indicating paracentesis, but even with one or the other of these symptoms absent, the others may be sufficiently pronounced to warrant the operation. This is especially true when the mastoid becomes tender or when symptoms of meningeal irritation such as headache, restlessness, dizziness, vomiting, convulsions, etc., appear. With such symptoms associated with redness of the drum, even though there be no bulging, no pain and no fever, paracentesis should be practiced without delay.

The operation, though rapid of execution, is very painful notwithstanding Politzer's statement that the operation is seldom painful. Local anesthetics have been suggested to lessen the pain, a favorite one being a mixture of equal parts of menthol, cocaine and carbolie acid. None of them have proven very successful.

The writer has on several occasions employed Somnoform and in unmanageable children a more prolonged anesthetic, but it seems to be the rule of most otologists to employ no anesthetic whatever. The operation is not difficult of execution for those accustomed to the use of a reflector.

The operation should consist of more than a mere puncture of the drum as the term paracentesis would indicate. A free incision should be made across the drum just below the lower extremity of the malleus (umbo), or if some portion of the drum is bulging, the apex of the protrusion should be selected as the point of incision. The operation is nearly always followed by relief of pain, reduction of temperature and a free discharge of pus.

OSMOTIC ACTION OR PHARMACOLOGICAL ACTION OF SODIUM CHLORIDE.

By VIRGIL E. SIMPSON, Louisville.

The largest class of pharmacological phenomena result from changes in living matter in consequence of a specific chemie affinity. Not a few, however, exhibit phenomena which result from physical properties of molecules rendering them conspicuous and important, and which are independent of their chemie composition. This latter class of agents affects living matter much in the same manner as they do dead colloid substances: by an alteration of the physical properties of the fluids contained in it, or which surrounds it. Sodium Chloride belongs to this latter group.

OBSERVATIONS IN THE LABORATORY.

Diffusion: If an aqueous solution of salt be overlaid by distilled water, the dissolved molecules pass throughout the fluid until the upper layer contains sodium chloride molecules and the composition of the two layers becomes uniform. (Two solutions of two different salts yield same results.) This phenomenon is due to fact that the salt molecules are in motion, going freely in all directions similarly to gases, but slower.

Osmosis: When the two liquids are separated by a pervious membrane instead of being in direct contact, there is no essential difference in the results since the molecules of both the water and salt pass through the physical pores of that membrane. A different result is observed when a membrane is used that does not permit the passage of the salt. Here the water passes through until it is exhausted or, hydrostatic pressure puts a quietus to further movement. The water after passing through to the salt cannot diffuse in the opposite direction; if it did so a more concentrated solution of the salt would be produced, which action would necessitate the expenditure of energy: eg. heat, and no energy is available in such simple experiment.

Colloids and Crystalloids: The first of these two substances, into which soluble substances may be divided, are by far the most abundant of the constituents of protoplasm, determining its physical and many of its chemical properties. Put in solution they consist of large molecules; tend to coalesce and form precipitates; can be parted from their solution by filtering; diffuse slowly through water and scarcely at all through animal membrane; and develop small osmotic pressure.

The latter class, Crystalloids, possess small

molecules, relatively; large osmotic pressure; diffuse readily through water and membrane.

Osmotic Pressure: Each molecule, by striking against the walls of the container, exerts a certain pressure. The pressure of two solutions on either side of a membrane is equal if each contains the same number of molecules per cubic space. The pressure will become unequal when the membrane is permeable to molecules on one side and impermeable to those on the other; this excess of pressure is called "osmotic pressure," or "osmotic tension." The rapidity with which water on one side will pass to the salt solution on the other side of a membrane impermeable to the latter is determined by the degree of concentration of the salt and it becomes slower as the process continues.

Definitions: An isotonic solution means, in physiology having a salt concentration identical with the blood serum. When one solution has a greater molecular concentration than the other, water diffuses from weaker into stronger until they have an equal concentration the stronger solution is called *hyperisotonic* and the latter, *hypoisotonic*. Osmosis may be defined as a term applied to physical phenomena which result when solutions are brought in contact through a membrane permeable to the solvent. (Sollmann.) *Osmotic pressure*, as the resistance offered by a non-permeating salt to passage through a membrane of the fluid in which it is dissolved and varies with the number of molecules and ions. (Cushing.)

Summing up, the following laws of osmosis may be adduced.

I. Solutions tend toward establishing identical molecular composition in kind and number of molecules when separated by a membrane permeable to the solvent.

II. An exchange of molecules will take place without, alteration of volume or pressure, if the membrane is permeable to both the dissolved substance and the solvent.

III. An increase of fluid or, an increase of tension, or both, will obtain in the hyperisotonic solution if the membrane is less permeable to the dissolved substance than to the solvent.

PHENOMENA IN THE BODY.

Effects on composition of cells: With this brief resume of the physical processes of salt action, an application may be made to the phenomena of life. Cells consist of colloid material containing diffusible bodies and fluid and are surrounded by fluids practically salt solutions, that are isotonic with the cell contents.

The normal concentration of blood and

lymph is adapted to the best performance of cell function and any departure therefrom results in structural changes: liquefaction or condensation, precipitation or solution, swelling or shrinkage, and may lead to distinct secondary decomposition. In other words, when the cell, or lymph surrounding it, undergoes a change of contents a certain movement of fluids occurs after the manner described in the laboratory experiments. While all the changes produced experimentally in the laboratory which render protoplasm more granular, opaque or viscid, and lessens its motility, may be observed, the phenomena consists chiefly in alterations of salt content, water and internal pressure. Body cells are permeable by water, hence a dilution of fluids surrounding them results in an increase of their fluid contents and swelling, as a consequence, occurs. This hypotonic solution also causes a withdrawal of the salt content of the cell, because whenever the ratio of the different salts in the surrounding media differs from that of the cells, their ratio in the latter must be altered.

The red blood cells have been quite carefully investigated and results of experiments with them will serve as an index. They are quite permeable to Ammonium Chloride, for instance, while impermeable to Sodium Chloride. When placed in a solution of Am. Chlor., of whatever concentration, they begin to show an increase of fluid contents, become swollen, and finally lose their hemoglobin; if placed in an isotonic solution of Sod. Chlor. they remain unaltered in both size and composition; in hypertonic solutions their fluid contents diffuses out and the cell shrinks.

From this we learn that the cell possesses different degrees of permeability to different substances; that when the salts are withdrawn from the cell some must leave it more rapidly than do others; and finally, it is to this different permeability that a cell is able to maintain its integrity in spite of some considerable change in its environment. The blood and lymph also resist measures to disturb their normal concentration; the quantity of salt and water taken in the food produce little effect; even intravenous injections alter them but temporarily. The only way that it can be raised permanently is by interference with the kidney, its regulating mechanism.

Effects on functions of cells: Such general physical changes in cell composition, as have been mentioned, are accompanied by corresponding changes in cell function, viz.: stimulation, irritation, and, when great, depression. Contact with hypotonic solutions

tends to produce depression, while irritation is the predominating manifestation of hyperisotonic solutions. The burden of these changes is borne by the metabolism and hence such cells as have the lowest vitality suffer the most marked evidences of these nutritive changes. Since embryonal tissue, the result of inflammation, has but small resistance, a conspicuous evidence of salt action is the tendency to disintegrate such formations, whether anatomic or chemical. In the case of specialized tissues the response is along the line of their proper functions: contraction results when water is abstracted from muscle tissue; unfertilized ova of marine animals have been made undergo parthenogenetic development (Loeb).

Effects on blood and Lymph: When sodium chloride is introduced into the body, regardless of channel or concentration, it tends to increase the quantity of plasma, make it more watery and lessen its viscosity—a hydremic plethora. Iso or hypotonic solutions dilute the blood by their own fluid; hypertonic solutions abstract fluid from the tissues until its normal concentration is restored. A hydremia is the consequence in either case. After the blood has been thus diluted, its restitution (total quantity, proportion of corpuscles to plasma, etc.) rapidly occurs. It is considerably advanced before an intravenous injection can be completed. Sollmann estimates that the molecular concentration returns to normal in about 10 min., individual constituents in half hour, and after 2 hours only very minor inequalities are present.

When a hyperisotonic solution of sodium chloride is introduced in the bowel an effusion of fluid from blood and lymph vessels takes place resulting in a more concentrated blood than normal—more corpuscles and solid matter per cubic millimeter. Less fluid in the vessels also establishes a lower tension of the pulse. A hypotonic solution put into the bowel tends to pass into the vessels and opposite effects are noted, viz.; increase in volume and fewer corpuscles per cubic millimeter—a condition of hydremia. In either case, the normal balance of corpuscles and plasma must be restored and currents are inaugurated between the blood and fluid in surrounding lymph spaces to effect such end. The phenomena of these currents have been studied by injecting salt solution into the vessels directly, as the salient features resemble the effects which follow absorption from the bowel. If a blood is made hyperisotonic by introduction of a strong salt solution the lymph begins to pass into the blood vessels by osmotic attraction. The resulting hydre-

nia increases *capillary* pressure which in turn induces a flow of lymph from the blood vessels. The lymph flow from blood vessels is, therefore, primarily diminished by salt's presence in the blood and secondarily increased by the high capillary pressure. As the salt is excreted by the kidney, and other glands, with the consequent continuous variation in osmotic pressure in blood lymph this augmentation of normal interchange of fluids continues. It is, as yet, undecided whether the whole process is dependent upon variations of osmotic pressure or, whether the cells of vessel walls have some secretory function akin to glands. So long as the salt content of the blood serum remains unaltered (isotonic) there is no change in size or shape of the *red cells*. When rendered hypotonic they become larger, due to the absorption of water and the hemoglobin diffuses into the surrounding liquid. On the other hand if the blood is made hypertonic by the introduction of strong salt solutions they shrink in size and become crenated. The salt itself penetrates red cells with much difficulty and such changes as are induced by changes in percentage of salt in serum are due to alteration of fluid contents only. Were this true of all cells an isotonic solution would keep them in a normal state until a want of oxygen or exhaustion of reserve of food produced their death. But, as Loeb has shown, some ova and fish put in a sodium chloride solution isotonic with sea water always die, where if placed in Ringer's solution, which has other bivalent elements, they can live.

Effects on Kidney: That diuresis is caused by salt solutions is a statement easily made and verified, but to explain the *modus operandi* is quite difficult. Some authorities holding that the renal cells are stimulated to greater activity in a manner somewhat similar to caffeine; others, and they are in the majority, claim it is due to the increased volume of blood incident to absorption of the fluid; that the augmented flow of lymph increases the capillary pressure in the glomeruli thus promoting the escape of fluid into the capsuli; a speedier flow through the tubules results; the fluid remains a shorter time in the glomeruli and a smaller quantity is reabsorbed into the blood vessels; and the fluids, urea and dissolved salts reaching ureters are likewise increased. Such constituents as are ordinarily most readily absorbed by tubular epithelium are increased most e. g.: chlorides of sodium and potassium show greater increase than sulphates, phosphates and urea.

The salts of the urine are increased dur-

ing diuresis from any cause. The sodium salts are more noticeably increased than those of potassium because they normally constitute a larger part of the glomerular excretion and they even predominate when the diuresis is produced by the potash salts. Bunge claims that this explains why herbivorous animals and agricultural peoples seek common salt, the vegetable foods containing a greater quantity of the salts of potassium; while hunting peoples and the carnivora require little or no salt, even often having a distaste for it. Lapicque, on the other hand, has discovered African races subsisting on a vegetable diet alone, who use ashes of plants which contain much more potassium than sodium salts. He concludes that sodium chloride is of value as the flavoring agent merely.

Gastro-Intestinal System: In the mouth salt has a characteristic taste. It possesses some astringent action in strong solutions. The saliva is increased by reflex action from the mouth and also because it is excreted by the glands acting as a mild irritant at the points of its elimination.

In the stomach its action resembles that on other mucous membranes. Strong solutions cause a withdrawal of fluid which, together with the local effect on the nerve ends, induces nausea and vomiting. Digestion may or may not be improved by addition of salt to the food, as even small quantities may lessen the acidity. There is little, if any, effect produced on the amount of albuminoid absorbed from the alimentary canal when salt is added to the food as a condiment. On the whole, a small quantity added to the food makes it more palatable to most persons and thus behaves as simple bitters, increasing the gastric juice. Dapper states that the HCl is increased in some persons, while it is diminished in others by the ingestion of saline waters. Cushny explains this by supposing that these waters have no effect on secretion directly, but that they alter it by a change in the nutrition of the gastric mucosa.

In the intestines strong solutions produce irritation and abstract considerable fluid from the vessels both of which are factors in increasing peristalsis. The drinking of larger quantities of an isotonic solution than the stomach can absorb permits its passage into the intestine, increasing the normal fluidity and aiding in hurrying the contents along the tract.

Nerves: Strong solutions irritate exposed nerves by withdrawing the fluids, producing such symptoms as are referable to the particular functions the affected nerves possess.

Muscles: Experimentally an isotonic solution preserves the normal irritability of muscles for several hours. Indeed, they often develop a series of more or less rhythmical contractions. In the body such solution having no osmotic action is productive of no effects other than preserving or restoring the normal conditions which permit of proper functions. Factors lessening the normal percentage of salt in the body fluids permit of absorption of water and loss of tone. An increase of this percentage causes obstruction of water from the muscle and increases its irritability.

Skin: The skin of mammals absorbs neither water nor salt. In man a diluted salt solution penetrates into the superficial cells of the cutis causes them to become soft and swollen. Concentrated solutions abstract water from the surface cells and produce a mild irritation. On the less protected parts, such as the cornea, the absorption is greater and it becomes clouded and opaque in appearance under applications of hyperisotonic solutions; such solutions also cause much pain and a smarting sensation when applied to mucous surfaces or wounds, due to disturbance of normal relations of salt and fluid in surface cells. Isotonic solutions are entirely inert.

Absorption: Salt solutions are absorbed from both stomach and bowel. Explanations of this action by known physical processes—diffusion, filtration and osmosis, are, perhaps, not entirely adequate. It must be assumed that there is a tendency for fluids and some salts to pass inward from the lumen of stomach and bowel, and that such tendency is increased by osmotic pressure. (Cushing). This unexplained tendency to pass inward may be due to some "affinity" between the salts and the colloids of bowel wall. A hypotonic solution is absorbed readily because of the "natural flow inward," and also because the osmotic current is in the same direction—the fluid in bowel having a lower osmotic pressure than the blood serum. Pure water is, probably, not absorbed from the stomach until it has taken up a certain content of salt diffusing into it from the gastric blood vessels. When an isotonic solution is given only the "natural flow" is active and absorption is much slower. A hyperisotonic solution is absorbed still more slowly since the osmotic pressure is acting in opposite direction to "natural flow." In fact, there is an actual increase of fluid in the stomach or bowel, though eventually the salt is absorbed and the solution becomes isotonic and permits of absorption.

Metabolism. Any agent, whether water, salt solution, or other substance, that causes an increase in lymph flow, flushes out the cells and increases the urine would be expected to establish a more complete removal of the waste products of the body. Hence, we are prepared for the statement that salt solutions promote the excretion of such waste material, though the increase of nitrogen and sulphur is, probably, not as great as stated by some observers, 5 per cent. being, perhaps, a liberal maximum estimate. It must be borne in mind that salt solutions, greater than the percentage of normal serum, lessens proteid metabolism by direct influence on the cells, though clinically, this may be concealed by the increase due to diuresis.

Untoward Action: A fatal termination may result from the enormous withdrawal of fluid from the central nervous system when strong solutions are introduced either intravenously or by hypodermoclysis. The symptoms are increased reflex irritability, tremors, convulsions, mental and physical lassitude; the red cells become shrunken and thrombi may form in vessels. (Heinz.)

Edema of the lungs, swollen mucous membranes and hemorrhages in different organs. The circulation is not markedly affected until just prior to dissolution, when a marked fall of pressure occurs.

Therapeutical application — Baths: That patients sent to the various alkaline resorts are benefited is but a just admission of facts. Upon what the success of such treatment depends is open to question. The consensus of opinion is that the rest, relief from mental and physical demands, alteration of diet, change, change in habits, climatic conditions and the ingestion of water, as water simply, are responsible for the benefits derived. In bathing, whether water contains salt or not, the action is purely a local one, as neither is absorbed. It is true, however, that the irritant effect on the skin will improve the peripheral circulation and, as a consequence, its nutrition bettered; this, together with the added cleanliness may be of benefit in certain skin diseases. The procedure will also give tone to a vaso-motor system that adapts itself slowly to sudden atmospheric changes and lessen the congestion of internal organs and mucous surfaces—in other words, lessen the tendency to contract what is commonly called a "cold."

The reported results on tissue change alleged to have been obtained by baths of strong salt solutions lack sufficient confirmation to be entirely credited. The advertisements of certain special baths for special diseases are misleading. Whatever good comes from alkaline baths is in ratio with the degree of concentration only, and it is of no practical importance which of the neutral salts the water contains. Traces of iron, etc., do not add to their intrinsic value in the least. The psychic effect is a factor which must not be forgotten in determining the good results at these various springs, as is the case with electricity and other imponderable remedies.

Gastro-Intestinal System: The ingestion, regularly, of large quantities of a weak salt solution may be of benefit in gastric disorders, functional or organic. Since the action on the mucous membrane resembles that on the cutis—mild irritation, increased blood supply, increased movement of fluid in lymph spaces and gentle stimulation of ends of secretory nerves—the rationale can be appreciated.

The efficiency of salt as an emetic is of common application. It must be remembered that, as is true of all local emetics, its action depends upon the integrity of the nerve ends in the gastric mucosa and that when their sensitiveness is obtunded, a slower action will be obtained, or, if entirely lost, the emetic effect is absent, e. g., opium poisoning. The selection of sodium chloride as an emetic is more imperative when silver nitrate is the poison in the stomach, as it combines with it to form the insoluble and non-corrosive silver chloride.

Muller and Saxl undertook to demonstrate a basis of diagnostic value in the detection of pathological alteration of gastric secretions, claiming that a distinct relation existed between digestive processes and salt elimination. Following a meal the salt elimination curve drops very low on account of retention of chlorine for the elaboration of HCl.; when the acid is diminished in quantity the drop is not so low; while in complete achylia and carcinoma of stomach, no appreciable drop in chloride elimination is observed.

Saline solutions are more active as purgative enemata than water, if concentrated. The irritation produced by the salt plus the effect of bulk, stimulating the peristaltic action of the bowel. Intestinal parasites, particularly the oxyuris vermicularis, can be destroyed and removed by strong solutions used per rectum.

Disorders of Metabolism: Gouty and rheumatic patients have long been treated by

sending them to alkaline springs in the belief that waste products are rapidly removed from the system. The work of reliable investigators done recently seems to have determined that salt solutions, or water, in large quantities have but little effect on the excretion of uric acid. The fact that gout is not due to faulty elimination of uric acid, as now known, saves us from condemning the treatment as erroneous. Indeed, were it otherwise, it would be a difficult task to uproot a belief, co-existent with civilization, and even recognized by some religions, that natural waters have pronounced healing properties. A notable example may be cited by reference to the pilgrimage of thousands of credulous sick to Lourdes, France, since 1858.

Such waters as Homberg and Kessingen, have been recommended in obesity. The percentage of sodium chloride in these waters varies between 0.2-1.4 and it may justly be questioned whether they are of much value.

Its Use in Hemorrhage: When much blood has been lost salt solution is absorbed rapidly. Isotonic solutions should be used and may be given in any way. The improvement of the circulation is very rapid and pronounced, both as to force of heart's contraction and the pulse tension. This effect is due to the increase of fluids in the body only, and must not be considered as the result of a direct stimulation of the heart or, vaso-motor system, as in the case of digitalis. An infusion given in cardiac weakness from causes other than hemorrhage and some intoxications (of which more anon) is the outgrowth of this misconception and accomplishes nothing.

The beneficial effects of salt solution in loss of blood is not unanimously conceded. Feis, a late investigator, concludes that it does little or no good. Biernacki also claims that large quantities of such solution at first very much dilute the blood, becoming later much concentrated, and that in a few days a considerable number of red cells are found in a state of disintegration and lastly, that the hemoglobin thus liberated in plasma was finally excreted by the kidney. Other observers have recently shown results that apparently disturbed the general belief of the profession that it is a harmless procedure.

Intraabdominal Infusion: Jamopolis reported as a result of his experiments on dogs in which intraabdominal hemorrhage was produced, that no peritoneal adhesions were found in those receiving saline infusions at time of experiment; that the blood clots were absorbed more rapidly; that the most marked

advantages followed those cases which were bled profusely: and that in 85 per cent. of cases not so infused, organized clots destined to become adhesions were present. All this in addition to its acknowledged service in preventing or relieving shock. Whether the absorption of the blood takes place by way of the vessels directly or, indirectly thru the lymphatics, has not been settled; after exhaustive work by Heidenhain, Starling and Wagner, they being unable to agree.

Large amounts of the solution can be taken up by the peritoneum without damage to its integrity. Megner showed as early as 1876 that it absorbs gases, liquids and solids without causing peritonitis. Intraabdominal infusion, following injury, intentional or accidental, to the peritoneum cannot be done promiscuously. Vaugh and others conclude that it is bad practice to introduce a saline solution, or any other fluid, when infection is present as it increases area of distribution of germs. The integrity of the peritoneum is injured by irrigations of distilled water.

Infectious Diseases: Sajous has made it clear that the chief role in the maintenance of the integrity of the blood is played by the status of its alkalinity. In all febrile conditions the tissues suffer from what may be called a saline starvation. During health the plasmatic salines are supplied in the food, but with the onset of disease, anorexia and restriction of diet lessen the supply, while the output continues, often increased. The source of the supply is naturally external since there is no reserve, as in the case of fats, and the consequences of salt deprivation—impairment of cellular interchanges and diaporesis, diminution of oxygen-carrying power of blood and osmosis, must supervene. Taylor also maintains that proper alkalinity maintains the blood's antitoxic properties, whether we agree with Ehrlich in his receptor theory or, with Sajous that the internal secretions supply the needful protective agents to the blood. Nearly five years ago the latter said, "The primary effect of deficiency of alkaline salts in blood being to inhibit nutrition; to impair the efficiency of and finally arrest, the protective functions of the organism, it constitutes one of the most active causes of death." Howell, in his recently published physiology, says: "The salts of the blood are bound up in the structure of the living molecule and are necessary to its normal reactions or irritability. Metchnikoff, Behring and Nisser concur in belief that as the febrile process goes on, a consumption of salt keeps pace, which being inadequately renewed, the cell functions, vital and defensive, are progressively hampered until death oc-

curs. Taylor gives the normal saline (6-1000) to all children in whom a temperature occurs, freely; modifying the milk and diluting the food with the same.

Jaworski has collected data establishing unquestionably favorable action in puerperal infection. The improvement was slow, but constant. The emunctories must be kept functioning to be effectual, considerable amount of fluid must be removed from gut or by venesection, thus ridding the system of the toxins and lessening pressure. He claims that especially good results are obtained in chronic forms.

The good effects from the saline solutions in febrile conditions have been attributed, by some observers, to the water entirely. Kraus points out, however, that "water once within the body is no longer (merely) water, but must be considered in its relation to the various salts, colloids, etc., with which it comes in contact."

Diseases of Nervous System: Griedenberg's series, as reported, included psychoses, acute insanity, melancholia, catatonias and mania; he claims that saline infusion quiets the psycho-motor centers and promotes sleep and appetite. He administers it in doses of 250 c. c. increased to 1500 c. c., devoting from twenty-five to thirty minutes to each injection.

Probably in no other class of diseases will salt baths produce better results than in the chronic affections of this system.

Renal Diseases and Dropsy: There has never been a quite satisfactory explanation of the production of edema in renal diseases. Loeb thinks it is dependent more upon osmotic changes than vascular pressure, and that all resulted from modified metabolism which permits soluble substances to accumulate in the lymph spaces.

Widal explains it by the fact that sodium chloride is not eliminated with normal facility by a kidney having diffuse nephritis as a lesion, and that when taken in usual amounts with food, large amounts of fluid accumulated in the intra cellular spaces because of increased osmotic pressure. Laufer argues increased osmotic pressure due to accumulation of salt in the tissues is not the only factor. He observed that patients having both interstitial and diffuse nephritis showed a rise of blood pressure of 22 to 34 m. m. in former and 18 to 30 in latter, when on a diet with none or little salt.

It is a fact that the elimination of chlorides is lessened in diffuse nephritis, and a variable amount eliminated in interstitial form. Widal and Javal in their article

"Cure by Dechloridation" reached the following conclusions: (a) sodium chloride causes pronounced edema in diffuse nephritis, (b) no results obtained in intestinal form when same quantity was used, (c) the edema so produced varies with the amount of salt taken, (d) that giving or withholding albumen in diet of nephritic subjects is immaterial as salt alone is responsible for the edema. N. S. Davis noted that "There was uniformly a small elimination of sod. chlor. when there was much edema, and it increased in proportion to the disappearance of the edema." He explains the evident benefit of withholding salt from food in diffuse nephritis as due to there being as much salt retained in the tissues as is within the power of the diseased glomeruli to excrete, and that its withdrawal checks its accumulation in the tissues and the consequent production of edema.

Castaigne and Rothery found that healthy animals deprived of salt develop albuminuria; that when fed unusually large quantities albuminuria was also produced; and finally, that injections of small percentages in those that had nephritis, a fatal result was precipitated.

In pneumonia but small amount of salt is eliminated by the kidney during active stage of development, and an accumulation in large quantities occurs in the diseased structures. The retention of the salt is due partly to storage of salt in the effusion. Edema is the logical outcome, and food for reflection is afforded.

REFERENCES.

- Cushing—"Action of Drugs."
 Davis, Illinois Med. Jour. Aug. 1904.
 Howell, Text Book of Physiology.
 Jamopolis, Journal A. M. A. Nov. 3, 1906.
 Jaworski, Journal A. M. A. Dec. 31, '04.
 Loeb, American Med. Jour. Nov. 1906.
 Muirhead, Va. Med. Semi-monthly, July 27, '06.
 Sollmann, Text Book of Pharmacy.
 Todd, N. Y. Med. Record, April 14, 1906.
 Taylor, Journal A. M. A. Nov. 10, 1906.
 Humison, Surg. Gyn. & Obst. July, 1906.

THE CONDUCT OF LABOR.

BY EDWARD SPEIDEL, LOUISVILLE.

A careful review of the latest text books on Obstetrics reveals the fact that in the conduct of labor at least no especially new procedures are advocated.

In a condition, however, that confronts the general practitioner almost daily it is not unpractical at least to call to his mind the salient points in the treatment that one is apt

to forget and with that in view the editor of this department presents a series of articles based upon this subject, culled from the very latest text books, adding points derived from considerable experience in private and hospital practice. While nothing especially new or original is offered it will, perhaps, call to mind many little points that have been neglected.

THE FIRST STAGE OF LABOR.

Nothing is more trying, than to attend the modern young woman in the first stage of labor. As a general thing the ordeal consumes the greater part of a day and night, the doctor to do something.

everybody in attendance is worried and fretted and the patient is constantly pestering the doctor to do something.

According to instructions in the text books the physician is to conduct himself with masterly inactivity as nothing is more harmful than injudicious interference in this stage.

To many this will mean standing aside and doing nothing, when, as a matter of fact, it is in this stage that the patient needs the encouraging support of the physician more than in the second.

I have found it a good plan to instruct my intelligent patients in regards to what really occurs during labor, explaining the first and second stages to them.

This is done for two reasons, first of all because I often find my young patients badly scared by the information that their injudicious lady friends have given them as to the trying ordeal through which they are to pass. Secondly, because I can then explain to them why the physician can do so little for his patient in that first stage.

The conduct of the first stage may, then, be said to begin several months before its onset, in definite instructions to the patient as to diet, exercise and bathing and especially as to the action of the bowels and kidneys. Surely everyone will admit that a patient properly instructed in that direction should enter upon labor with more favorable prospects than the one who has not received such advice.

The patient should receive a simple list of articles to have ready for the time; such a list may be extremely simple as the one following, a copy of which I am in the habit of handing my patients before labor or exceedingly elaborate as for instance, the lists found in Williams' and Peterson's Obstetrics.

DR. EDWARD SPEIDEL'S OBSTETRICAL LIST..

Soap and sponge for the baby.

Colgate's or Mennen's Talcum Powder.

Powder Puff.

Two breast bandages.

Six belly bands for the baby.

A rubber sheet or piece of oil cloth for the bed.

One dozen each large and small safety pins.

Three-quart rapid-flow fountain syringe.

Douche pan.

One pound absorbent cotton, cut into pieces four by six inches, one inch thick.

Ten yards cheese cloth, washed and dried, cut into pieces 10 by 18 inches.

Soft blanket for receiving the baby at birth.

Two ounces of olive oil.

Four ounces powdered boric acid.

Two ounces Squib's chloroform.

A tube of Alboline.

A bottle of Bichloride Tablets.

That the above list is too simple for a wealthy patron and the text-book lists too elaborate for a patient in moderate circumstances is self evident. A happy medium may be reached in most cases by simply adding to the one list or subtracting from the other.

The patient should receive explicit directions as to how to prepare herself for labor, unfortunately most of our cases are not in charge of trained nurses and unless the patient receives explicit directions in this respect before hand this important part of the procedure will be sadly neglected.

Instruct the patient to use a soap and water enema. This should be insisted upon under all circumstances, if the patient is suffering from a diarrhoea it is more necessary than ever.

If the patient is informed that it will prevent the bowels acting in the presence of the physician just as the baby is about to be born, she will generally be very ready to carry out that part of the instructions.

A full bath if possible and under all circumstances a thorough cleansing of the abdomen, thighs and vulvar regions completes the preparation.

In order not to nullify the precautions taken, a clean towel or pad should then be placed over the vulva and pinned to the vest in front and behind. Again an explanation to the patient that these preparations will almost surely prevent her from having child bed fever, will bring about her ready co-operation.

As everyone knows the obstetrician himself is then the only remaining menace to the patient's welfare in an uncomplicated labor.

The physician may save himself much time and unnecessary loss of sleep, by let-

ting the patient know that labor may continue for a number of hours before it is necessary to call him and that if pains first show themselves after midnight, then 7 A. M. will be the proper time to notify the doctor. If labor begins during the day then the doctor may be notified sooner, in order that he may shape his other work accordingly.

Most cases of obstetrics are conducted by the general practitioner, with a considerable number of calls to make and office hours to attend to, and when he receives a sudden call to a labor case it is very apt to find him unprepared. He enters the house and makes a hurried examination without observing the rules in regard to that procedure. He makes his examination to find out what progress the case has made and in doing it carelessly he nullifies all the extreme precautions that he may later take in the conduct of the labor.

Undoubtedly many cases of Puerperal Infection are directly due to this first hurried slip shod examination. In order to avoid such mishaps the preparations demanded of the obstetrician should be extremely simple and of such nature that they can be carried out in the ordinary home at a moment's notice.

The ideal methods of preparing the hands are those advocated by Fürbringer and Halsted.

Halsted's method consists in closely clipping and thoroughly cleaning the nails. The hands and forearms are then well scrubbed for from one to five minutes, with a sterile brush, green soap and hot water. They are then rinsed in fresh water and immersed in a hot saturated solution of potassium permanganate until of a deep mahogany-brown color. This is removed by placing the hands in a hot saturated solution of oxalic acid, and when decolorized the acid is neutralized by placing the hands in a basin of sterile lime-water. They are then soaked for three minutes in a mercuric-chloride solution, 1 to 1000.

Fürbringer's method is as follows: The nails are pared and thoroughly cleaned with a pointed steel. The hands and forearms are scrubbed for from one to five minutes with soap and hot water and a sterilized brush. They are then immersed in hot water and then in 95 per cent. alcohol for one minute. They are then placed in a mercuric-chloride solution, 1 to 1000.

Those that have done obstetrical work to any extent in this part of the country, will bear me out in the contention that in most cases, the former method, at least, is imprac-

tial. Every doctor can, however, scrub his hands and finger nails thoroughly with soap and water, clean the nails with a nail cleaner and repeat the scrubbing in clean water and then immerse the hands in a 1-1000 Bichloride Solution.

These directions are simple and no one practicing obstetrics has a right to do any less than this in his first or in any subsequent examination, and if everything else about the patient is clean, this simple preparation should protect her in the great majority of cases.

For the vaginal examination the patient should be placed upon the douche pan, the legs draped with a sheet and a clean towel laid over the vulva, after the removal of the lochial pad and a mopping of the vulva with the Bichloride Solution. In making the examination the towel is turned aside, the Labia separated with the thumb and index finger of the left hand and under the sense of sight the examining finger is introduced into the vagina. There is no question about the absolute propriety and necessity of conducting the vaginal examination in this way. Every modern text book of Obstetrics without exception advocates this method of making a vaginal examination. The examination of the obstetrical patient by passing a finger under the sheet, traversing the rectum and perineum is as obsolete and even more dangerous than the old method of introducing the catheter by the sense of touch. Those who object to such as they claim needless exposure, on the grounds of respecting their patients' modesty, lose sight of the fact, that if properly draped, there is very little exposure of the patient's person and as absolute exposure of the vulva and inspection of the perineum is a necessary step at the end of the labor, it can hardly be more trying to the patient to become accustomed to such methods early in labor.

Above all give the intelligent patient the choice between the delivery under the sheet with all its attendant dangers, and the absolute security that can be assured her by this open method. If she fully understands these points then she will rarely let modesty be a consideration.

The douche pan should be a fixture in every household. In making the vaginal examination, the douche pan catches the excess of antiseptic solution that is used to mop off the vulva and the elevation of the patient's hips as a result of being placed upon the pan, gives a reach of at least an additional inch to the examining finger, as anyone will readily notice, who examines

with or without its use. As the cervix in the early stage, is generally very far back and to the side, the advantage gained can be readily appreciated.

It follows, of course, that in all subsequent vaginal examinations, the same care must be observed as in the first. The information gained by the first vaginal examination determines the further conduct of the case. In most instances there will be little or no dilatation of the cervix and the physician knows that there is a long, tedious time before him. His absence from the room and even from the house during the greater part of the first stage, is not only permissible, but desirable. When leaving, however, he should always state a definite time for his return and leave directions as to how he can be reached if a sudden change should occur in the labor. The patient eagerly looks forward to the return of the physician and in his absence, of course, feels absolutely unrestrained and can conduct herself in such a way as to assure herself of at least some comfort in her trying condition. Before leaving, the patient should be instructed how to conduct herself during the pains, to avoid bearing down or pulling upon anything as nothing is to be gained thereby in this stage. To remain on her feet as much as possible, resting on the bed or on a couch at proper intervals. The upright position is desirable, because it stimulates the uterus to contraction and gravity favors the dilatation of the cervix.

The first stage is attended with considerable pain. "This pain is due to the nipping of the sensitive terminal nerve fibres by the firmly contracted muscle fibres and later by the excessive dilatation of the os, the stretching of any sphincter being an extremely painful procedure." (Peterson.)

The patient of course clamors for relief, but it is unwise to begin giving narcotics at once as in a condition that may continue for from 16 to 24 hours, a constant repetition will then become necessary. Instead, some simple expedients may at first be resorted to. Deep stroking of the back in the lumbar region by pressing the fingers down on each side of the spinous processes of the vertebrae, or placing two drachms of chloroform in a 2 oz., wide mouth bottle, telling the patient to shake the bottle, remove the cork and hold it to the nostrils during a pain, will satisfy the patient. The effect in the latter case can only be psychic, as very little of the chloroform is used, the patient only inhaling the small amount of vapor disseminating in the bottle.

When dilatation is progressing satisfactor-

ily, then 15 grains of Chloral may at times be administered, this drug also having a relaxant effect upon the cervix. If the patient has been in labor the greater part of the day and as night approaches, dilatation has not progressed to a great extent, then it is advisable to give a hypodermic of Morphine. Under its influence the patient will get much needed rest while there will be no interference with the progress of the case, in fact it will often be found to proceed more rapidly. A hypodermic of Morphine, Hyoscin and Cactin will be found even more effective the tablets contain morphin sulphate gr. 1-4 Hyoscine hydrobromide gr. 1-100 and Cactin gr. 1-67.

The patient should be urged to take light nourishment during the first stage, to preserve her strength. If it nauseates her, then the general relaxation attending the vomiting will also affect the cervix favorably and dilatation will proceed more rapidly.

In a primipara, great care should be taken not to rupture the bag of waters, unless the cervix is entirely effaced and the pains are frequent and strong.

SELECTED ARTICLES.

THE "VIAVI" TREATMENT; ITS PROMOTERS AND ITS LITERATURE.

(From the *California State Journal of Medicine*.)

Some twenty years ago, more or less, two young men, with a very small capital, but with highly developed commercial ability, and an "idea," began business operations for the development of the "idea" in San Francisco. It was soon evident that the "idea" was no less valuable than the methods of development followed by the clever promoters. Time passed, the business grew and expanded beyond the limits of the city or the state or the country. But the smooth surface of the municipality was not disturbed; these two quiet gentlemen did not advertise themselves or their business methods by forcing either upon public attention.

They soon began to acquire real estate in the vicinity of Van Ness Avenue, at first for their business requirements, and later for the investment of their profits. Presently their activities expanded; they moved into the down town real estate field and exhibited a shrewdness and a judgment in the selection and exploitation of development enterprises that very soon attracted the attention of the business men of the community. The

Crossley and the Rialto Buildings were of their holdings; and were later traded for the Fairmont property; it is said, very advantageously. One of these brothers—for the men are brothers—undertook, we are told, on his own account the erection of the Monadnock Building on Market street, which, it will be recalled, was one of the buildings practically undamaged by earthquake and but little by fire. The land is said to have cost \$1,000,000, and certainly the building must have increased the investment very considerably. It was one of the first buildings to be put in habitable shape immediately after the fire, and the financing of the enterprise is regarded by some business men as one of the cleverest pieces of financiering known in the city.

With the erection of these excellent civic improvements, attention was attracted to the two brothers who were thus demonstrating their faith in San Francisco, no less than their business acumen, by these very considerable investments from the proceeds of the well-cultivated "idea." They soon became prominently identified with various commercial activities. One of them was urged to become a director or trustee of the Young Men's Christian Association, and did so, retaining that connection, by request of the association, up to the present time. The other brother, we have been informed, has so impressed the financial element of the community with his most remarkable abilities as a financier and his excellent judgment in the selection of investments, that he was offered a large honorarium to give a few hours of his time as adviser to the management of one of the large banking institutions of the city, but could not spare the time from his own affairs. The commercial sagacity which saw the value of the "idea" and its development along original lines, and which intrepidly had its beginning with an extremely small capital, has been justified a thousand fold and has added to the city many large and magnificent buildings.

The real estate and commercial activities of these brothers must have been conducted with scrupulous probity, for they have the confidence of the moneyed interests and none is so keen to detect dishonest practices as the successful business man.

Let us see whence came this stream of gold, pouring from the original "idea," broadening and deepening until it has become a river of gold, capable of conversion into palatial buildings and holdings valued at millions.

The "idea" found its material existence

in what is known to the promoters as "the Viavi treatment," and in its essence is so simple as to pass recognition. After reading all the Viavi literature hereafter referred to, and after statements made to us by Doctor Law, in our opinion the merit of the "treatment" consists in the well known principle of the vaginal douche. To be sure, the real "idea," the douche, is masked about and hidden under "Viavi capsules" and "Viavi cerate," and "Viavi royal," and almost innumerable other "Viavi" stuff, with curative powers apparently unlimited, as appears from the statements of the promoters hereafter set forth. Other things were cultivated as the territory enlarged under the brilliant management of the promoters, but the original source of the golden stream seems only to be the vaginal douche.

It is a well known fact that women seem to have the singular and rather unhealthy idea that the sexual organs should be ignored as something "low," "vulgar," or "indecent." Most of them do not keep those portions of the anatomy which are peculiar to themselves, clean. Few mothers teach their daughters even the fundamental facts of reproduction or the physiological data concerning their peculiar sex characteristics; fewer teach their daughters to keep the vagina clean by the use of douches; and fewer ever know, until they learn through experience, generally bitter, the tremendous importance of cleanliness and hygiene in the duties and obligations which are assumed with marriage.

Most women suffer more or less from their reproductive organs, and a very considerable amount of this discomfort or suffering is due to lack of common sense cleanliness. And that, as we understand it, is exactly what the agents of the Viavi are eternally preaching; it is almost every other word in the documents which the concern puts out; keep the vagina clean, by the use of the douche, and use a little common sense. The immediate increase of personal comfort, and many times the quick relief from some annoying minor ailment, which follow upon the exercise of cleanliness and common sense, might so hypnotize the average woman who accepts the Viavi preachments and takes the Viavi "treatment," that she would be ready to believe almost anything the promoters care to tell her. But, of course, no large paying business could be built up by simply selling a little good advice and a trifle of common sense. There must be something definite to take, some wonderful, secret and very costly remedy that will work the result, to secure which the douche is but the merest prelimi-

nary. Hence the "capsules" and the "cerate" and the "liquid" and the "royal," and the rest of the wonderful remedies which, collectively, leave little uncured or incurable by Viavi.

Now let us see how these gentlemen, Messrs. H. and H. E. Law, originators of the "idea" and of the "Viavi treatment," as we have seen, well known citizens of San Francisco and prominently identified with members of its upright and honorable commercial bodies, work the "idea" and conduct its business side so that it earns for them the millions which pour into their coffers. The promoters are the brains and life of the enterprise and cannot be dissociated from it.

Do the Viavi "remedies" contain morphine, or opium, or some habit-forming drug? (See Journal, August 1906, page 205.)

The very question which we asked was bitterly resented by these gentlemen. They claimed it was a reproach to their self-respect even to intimate that they, who seek to alleviate the pains of suffering humanity in general, could trade upon human life and character by selling to innocent people habit-forming "dope." They sent us copies of all sorts of certificates from analysts showing the absence of any harmful drug. And, furthermore, upon reflection, we came to the opinion that from the purely business standpoint, it was unnecessary to put an expensive article like morphine, and one liable to bring about trouble in the future, into their "remedies" when they do not need to. We need no further enlightenment and accept the statement that the preparations are free from morphine, etc.

"Were the Viavi remedies used for the prevention of conception or the procuring of abortion?"

This query was even more horrible to the promoters than was the former question. The very thought that such objects or purposes could be attributed to them was most painfully distressing to the Messrs. Law, and they felt keenly injured in their self-respect. They assured us in every way, by the spoken and the written word, that, so far from their having ever advocated the repulsive measures suggested, their greatest joy in life is to feel that, through the benevolent action of their remedies, they have aided thousands to become fruitful and have made the barren woman conceive and bring forth.

But we had heard that their agents did sometimes recommend that Viavi was a means of preventing or aborting conception. Could it be so? Well, while they preached against it in every possible manner, irrespon-

sible agents would occasionally overstep their instructions and suggest the frightful misuse of the Viavi. But the company repudiated all such and, in a letter, offer to aid in the prosecution of any representative suggesting Viavi for this vile purpose, or offering to sell anything with Viavi for the same criminal object. Possibly the agents or representatives who so far transgress their instructions as to suggest the criminal use of what the makers hold to be one of the most valuable blessings ever bestowed upon a suffering people, have read and appreciated the import of the following statement (page 178 of a book entitled "Viavi Hygiene," edition of 1906), and another, quoted later:

" * * * but no attempt should be made to force or introduce the capsule into the mouth of the womb, as placing any substance within the cavity of the uterus is directly against the laws of nature, a fact shown by the contractions and labor-like expulsive pains that are induced by the introduction of any foreign substance within the uterine cavity."

We may safely assume that the Viavi "treatment" is free from opium, morphine, etc., and that the promoters do not encourage the practice of preventing or aborting conception. Such being the case, the question very naturally presents itself: "What is the Viavi treatment; what does it do and what do the promoters say of it; how do they present their claims and what do they claim?"

The original "treatment" was directed wholly to the afflictions of women, if we are not mistaken, and consisted of good advice, cleanliness, the douche and a capsule which was to be placed in the vagina, preferably high up and touching the cervix. Later, a cerate was made, the argument being that the vagina could not absorb enough of the wonderfully curative remedies contained in the capsule, so they were incorporated in the cerate, which was to be rubbed energetically into the back and belly. Still later, a liquid, also possessing the marvelous properties of the capsule and the cerate, was put out. At the present time there seem to be, in addition to the three forms mentioned, Viavi "Royal," Viavi "suppositories," Viavi "tablettes," Viavi "eye treatment," Viavi "ear treatment," Viavi "tonic" and Viavi "laxative."

As to what it is, we confess ourselves a trifle at fault. The manufacturers speak of their various preparations as though "the great Viavi" were an entity, a special and particular substance created for the purpose of being incorporated into all of their various mixtures, of which it becomes the essen-

tial and universally curative base. On the other hand, a firm of analytical chemists reported recently, as follows: "The capsules contain no morphine, and so far as we are able to determine, they contain nothing but the extract of hydrastis and cocoa butter." Here is a difference of opinion. As all of the preparations are said to contain "the great Viavi," and as this one is reported to contain nothing but the extract of hydrastis and cocoa butter, we might possibly be excused for holding the belief that hydrastis enters into all of these wonderful compounds, and is the multifarious curative agent; or else, that the identity of "the great Viavi" changes as it enters into the different preparations.

Do the promoters of Viavi place before their patrons truth or fiction? Do the Messrs. Law, in conducting the Viavi business, adhere to those principles of honesty and fair dealing which, as citizens prominently identified with other and very large commercial activities, presumably they must exercise? In the business which has brought to them such enormous returns, have they exercised the common or "garden" variety of honesty, or have they resorted to half-truths and to but thinly veiled appeals to other influences?

Let us see what may be gleaned from the publications which they sent us. These consist of ten leaflets or pamphlets, one entitled "Health Book for Mothers and Daughters," and a volume of 610 pages entitled "Viavi Hygiene"; the work of wading through the mass of material has been by no means slight, and we have called upon a prominent gynecologist and a distinguished surgeon to aid in our labors by going through the material and making such comments as occur to them. All italics, etc., in quotations are ours.

From the "Health Book" we learn that Viavi "is purely a vegetable compound — more a food than a medicine, and is prepared in a predigested manner, so that it can be easily absorbed by the tissues of the body with which it comes in contact. The capsule is applied directly to the uterus through the vagina and is absorbed, giving health, strength and vitality to these parts. The cerate is applied to the skin over the diseased organs, and here, through the absorbent power of the skin, the patient is able to introduce Viavi into the system directly and in such quantities as may be desired. The membranes lining the cavities of the body, especially those of the mouth and nose, the throat, the bronchial tubes, the stomach, the bowels, the uterus, the vagina, and the bladder, originate from one parent cell early in foetal life and often when a person is pre-

disposed to a weakness in this cell it is noticed in the lining membranes of these organs."

There is a truly beautiful, truthful and scientific statement! But why not include all the other tissues and structures of the body, which, equally with those named, spring from that one parent cell?

As we wend our strenuous way through the "Health Book," and through "Viavi Hygiene," we are ever confronted with references to the joys and pleasures of the "marital obligation," the terrific result upon the affection of the husband which follows upon the wife's loss of personal beauty, and we are continually informed that, as "nine women out of ten are lacking in health and strength, if not positively ill," the former pleasures will surely be lost and the affection wane, unless the unfortunate woman uses Viavi, when, of course, the desired result which follows upon health, is speedily secured.

Under the caption of Leucorrhea, we learn that "This is a complaint from which almost every woman suffers at some period in her life." *It is the very life force ebbing away.*" (Strangely like the phraseology of the "Men's-disease-only" quack in his "literature" relating to spermatorrhea!) "She cannot bear healthy children. They will be liable to total weakness of the system," whatever that awful condition may be: "They may have scrofula or even consumption." The horrors are piled up, and we learn that "There are deep rings under her eyes, her complexion is yellow, she grows irritable and inexplicably melancholy. If she is a wife those duties which were once her pleasure become obnoxious. No matter how much she may love her husband; her *marital obligation becomes distressing.*" Of course, Viavi dispels this all-embracing gloom, restores her "pleasure," removes the awful sentence from her unborn offspring and renders the "marital obligation" once more delightful.

Local offices are provided in all the principal cities and are presided over by "trained specialists in disease of women" who have a "larger experience with these diseases than any other specialists could possibly have."

Examination of patients is entirely unnecessary, by the Viavi "treatment"; the patient makes her own diagnosis, or "if a blank Health Statement is procured, filled out and returned, competent advice will be given upon it."

In one pamphlet we read that "A distinctive feature of the Viavi treatment is the per-

manency of the cure," while in another we are told that "It is one thing to make a cure complete; it is quite another to make it permanent. Of course we cannot insure anyone against a recurrence of disease." Of course not.

The proprietors of the Viavi "treatment" not only maintain that their agents are competent to suggest the proper treatment without examination of the patient, and that the omnipotent wisdom of the officials in the home office (or some other) can give "competent advice" by mail, but they refer in terms of greatest horror to physician, gynecologist and surgeon, intimating that more harm than good always results from obtaining professional advice from licensed physicians. The gynecologist is referred to as the "body carpenter" and his work as "sacriligious carpentry." We are told by the Messrs. Law in their publications, that operations "for the removal of a diseased breast rarely or never prove entirely successful," and that "extirpation or removal of diseased tissue by surgery is worse than useless."

One must pause to wonder what can be the sensations of the Fellows of the Chemical Society (England) when they think upon such utterances from their distinguished life member, H. E. Law, as we have quoted above. It must be gratifying to the fellow directors of Dr. Hartland Law, in the Young Men's Christian Association, to learn the remarkable degree of truth and scientific intelligence which he displays in his appeals to suffering women, no less than the respect which he shows toward one of the great liberal professions.

Let us quote a few extracts from the book, "Viavi Hygiene." "Let a father reflect what it means to a girl to be submitted to an examination even by a most considerate physician, if she falls ill—and these examinations are almost invariably made, and are rendered wholly unnecessary by the Viavi system of treatment."

"The mutual confidence that grows up between a sufferer and a Viavi representative is beautiful. Out of it arise conditions of the greatest value to the sufferer in her progress toward a cure. The sufferer opens her heart, is enabled by the knowledge that she acquires to explain her condition intelligently. * *

*" Of course, the untrained mind of a girl is much more able to explain her condition than could a "most considerate physician."

"Every day thousands of women throughout the civilized world are deprived of their sex by the surgeon's knife, but the emasculation of a man is so rare an occurrence as to be extraordinary."

"Believing, as they do, that a woman's sex

is of small or no importance to her economy, it is no wonder that physicians abound who will employ surgery to relieve them from the annoyance of menstruation and the risk of insemination."

"Wherever we look, using our eyes and brains, we see that sexual capacity and sexual appetite go together, and that they are absolutely inseparable; and there can be no sexual desire unless there is sexual capacity."

"A woman with a low estimate of the value of her sex * * * will not understand what her physical perfection means to her husband, nor how closely marital happiness depends upon it."

"A very large proportion of women's diseases were really incurable until the Viavi system of treatment was introduced."

"As for the influence of physicians with regard to the Viavi system of treatment, while many of the broader sort heartily indorse the treatment, some may be found arrayed against it, and ready to condemn it if their opinion of its merits be sought." (It would be interesting to know the names of "many of the broader sort" of physicians who indorse the Viavi "treatment.")

"The number of women whose breasts have been needlessly removed is appalling * * * a woman deprived of one or both of her breasts is hopelessly and lamentably disfigured."

There is a long chapter on "Conjugal Relations," which is certainly sufficiently explicit for the average girl whose father is warned against the evil, nay, terrible, results which are entailed by calling in a physician when she is ill. Much might be quoted, but one fragment will suffice:

"The evil effects of unsoundness of the sexual nature are so various and far reaching that even Viavi advocates *who have made so close a study of them*, doubtless fall far short of estimating them at their full value and to their whole extent. Thus, we may find conjugal infelicity between two persons seemingly perfectly healthy, the woman particularly being apparently perfectly sound in her sexual nature. (*sic.*) Yet she very likely inherited from her mother, through the latter's efforts to avoid maternity, a dislike for children and a refusal to bear them, thus incurring her husband's ill-feeling; or she may have inherited a dislike for her husband's attentions." (This is most respectfully referred to Havelock Ellis, and doubtless it will be found very edifying to him.)

"A wife may have so strong an affection for her husband that, even though she is lacking in desire, she takes a certain pleasure in

giving him pleasure; but it is clear that this is a different thing from sexual pleasure, and that unless a woman enjoys this sort of pleasure she is not only losing what nature intended she should have, but is violating a natural law of her being, and must suffer the penalty in one way or another." Of course we find, later on in the same paragraph, that "the effect of the Viavi system of treatment in such cases is remarkable in every way * * * rejuvenates the whole nature (*sic*) of a woman—makes her perfect in all the *attributes of wifehood*."

"Everything connected with it (Viavi) tends to bring women into a closer relationship with Nature and Nature's God."

"Curetting, the ordinarily prescribed treatment for flooding (metrorrhagia), has been rendered obsolete by the Viavi system of treatment."

"If the disease is in the form of tumors or polypi in the womb, she will be advised, sooner or later, unless she adopts the Viavi system of treatment, to submit to an operation in which her abdomen will be cut open on the median line, and the *symmetry of her figure destroyed*; perhaps she will be advised to submit to the removal of the womb. The Viavi system of treatment renders all these measures wholly unnecessary."

"A woman afflicted with any form of painful menstruation is in positive and imminent danger of a surgical operation, whether minor or capital, unless she adopts the Viavi system of treatment."

"Curetting is resorted to because those who employ it have no better means of treating the conditions that they wish to overcome. * *"

"The Viavi system of treatment has rendered curetting unnecessary wherever employed."

"Leucorrhea in time entirely destroys the chief function of the vagina. Its walls become loose and flabby. Thus *sexual commerce becomes unsatisfactory and incomplete*."

"* * * the remarkable effectiveness of the Viavi system of treatment * * * places it in the power of healthy wives to LIMIT THE NUMBER of their offspring for proper reasons, and women who are not fit for maternity to AVOID it by natural means."

What was it we asked about Viavi being recommended for the prevention of conception?

When the careful student of the book, "Viavi Hygiene," reaches the section devoted to tumors, he first learns the depth of ignorance in which all the scientific world, except the brothers Law, is sunk. No longer need the British Medical Association expend money or its savants waste time in trying to find the

cause of cancer. Let Harvard University terminate the existence of its Cancer Commission. These are all but foolish children, groping in the dark in the effort to find the cause of one of the saddest afflictions; the Law brothers have known it for years. The success with which they have kept their wonderful knowledge from the scientific world is no less than the modesty which they display in setting forth the facts in the greatest of all books. Listen: "If you have tears, prepare to shed them now!"

"The cause of these growths (tumors), which by inspiring terror drive so many women to a premature death by way of the operating table, is so simple a thing as a poor circulation of the blood. Tumors are caused by a stagnation of the venous blood * * * This important discovery on our part has swept away the mist that has always surrounded this subject and enabled us to accomplish the most remarkable cures * * *"

"Ovarian tumors, uterine tumors, whether inside the cavity, in the walls, or outside the walls; tumors of the vagina and Fallopian tubes; fatty, cystic or fibroid tumors; in fact, *tumors of all kinds in all parts of the body*, have been treated successfully by the Viavi method." The Young Men's Christian Association must take great pride to itself when it realizes that one of the gentlemen who voice this statement is on its board of control, for is not his modest plea calculated to draw shekels from the pockets of poor, suffering women in an anxious pursuit of health?

Nor is it only suffering women who may find relief at the hands of these gentlemen, these prominent citizens of our community who have grown from poverty to affluence—by exploiting the Viavi treatment. They do not hesitate to hold out encouragement to man when he contemplates the loss of his proudest possession, his testicles. For a monetary consideration, not stated, the Messrs. Law will give the wonderful Viavi treatment to men afflicted with atrophy of the testicles, and hold out the encouraging intimation of a probable cure.

"We recall particularly the case of a man suffering with wasting of the testicles, who secured perfect recovery from the Viavi cerate applied to the scrotum."

Note the keenness of the wording; the man "secured perfect recovery from the use of the cerate," not from the wasting of the testicles!

Indeed, the keenness of the verbiage is one of the most remarkable things about the Viavi "literature," and is but another of the indications of the commercial acumen of the promoters, the Law brothers; for some years they

employed, at no small expense, one of the cleverest writers on the Pacific coast. Such work as theirs was not to be left to the ordinary "patent medicine" circular writer; their "literature," like their "treatment," must be unique, distinctive.

We are told, with the greatest air of frankness, that appendicitis, paralysis, paresis, locomotor ataxia, asthma, palsy "and many more, proceed from a depletion of nervous force—from *nervous debility*." While we are nowhere told that all of these conditions can be cured by Viavi, we are told that *nervous debility* may be prevented or cured by it, and the natural implication, so subtly conveyed by the clever writer, might well produce the result that the poor incurable is parted from his coin; or the person with appendicitis is deluded into giving up, perchance, his life.

The London Lancet for March 10th, 1900, and January 17th, 1903, pays its respects to the Viavi Co. In the first-mentioned issue, it commented upon certain facts which came out at an inquest held February 25th, 1900, by the coroner of East Sussex, upon the body of a woman who had died while under treatment of the Viavi system. The jury handed in the following verdict:

"We wish to return a verdict of death from natural causes; we also think that the life of the deceased might have been prolonged had she been placed under properly qualified medical treatment, and from the evidence brought before us, we consider the Viavi Company a fraud." In another case heard before His Honor, Judge Parry, in the Manchester County Court, on May 17th, 1901, the same fraudulent parties had to pay £50, with costs, for breach of contract, i. e., for failing to cure.

It seems to us as medical men that nothing need be added to the force and effect of the foregoing excerpts from the literature issued necessarily with the approval of the Messrs. Law. But we trust that our present review of the "Viavi system of treatment," and of its promoters, will reach the eyes of many who are not physicians, and hence we must comment somewhat upon the general question discussed.

If the Laws are correct in their views on physiology and pathology, then the whole medical world is all wrong.

If their statements as to the value and effect of operations in cases mentioned in the foregoing quotations are true, then all the surgeons in the world are wrong and are doing infinite harm.

The whole progress of medical thought and advancement during the past hundred years is totally opposed to the remarkable theories

of the Law brothers. What reputable physician, not employed by them, could be found to agree with them?

And what can be said of their printed statement that when a woman has acquired strength through the use of Viavi remedies, she can control and regulate the the birth of her children and their numbers.

We ask all the honorable gentlemen who are business associates of the Laws, the directors of the Young Men's Christian Association, and the rest, what they think of the quotations from the Viavi literature above set forth? Do they agree with the claims of the wealthy brothers? Do they think that with increased health and strength a married woman can by more than one proper means control conception? Do they stand for that statement made by the proprietors of this "discovery?" Is the whole wide world, medical and lay, wrong, and are the commercially successful Laws alone right? Think it over, gentlemen!

Yet, of such is the business of the "Viavi" constructed; a business which has made two men, starting with practically nothing, affluent. Their patrons consist of confiding sick and suffering women, to whom, not skilled in medicine, their literature appeals.

Do their associates believe that the Viavi treatment can do what the Laws claim for it? Do they believe that it can cure or benefit the diseases in the list hereafter enumerated?

If they do not believe it, if they do not approve of the Law "literature," with its suggestions, with its insistence on the importance of the female form, with its intimations that the use of Viavi remedies will increase sexual pleasure, with its hints that wasting testicles can be benefited, and tumors of all kinds cured; with its insinuations, nay, statements, that child-birth can be controlled; that a woman can, through Viavi, become so "healthy" that she may "limit the number of offspring;" with their claims of benefiting suffering humanity and advising women never to have a tumor removed by the knife until, alas, it may be too late for the beneficent surgeon, and the victim of the false advice is claimed by death; if, we say, they do not approve of these things, what must be their thoughts, and the thoughts of the members of the Merchants' Association when they sit at dinner in the Fairmont Hotel on the night of April 18th, as we are told they will? Will they think of the matters treated of in this article and of the basis of the fortune of the Laws, or will they say "money talks," and think of what successful business men are the owners of the hotel in which they dine?

Will they care *how* the money has been gar-

nered? Will they question whether the Law brothers are benefactors of humanity, or merely successful in making money out of the sick and suffering?

Arthur McEwen has said that any "Front street merchant" would prosecute his chief clerk for embezzlement for the mere crime of emulation! Perhaps, business men of this city, pillars of our municipal society, you do not care how people become rich, so that they be rich.

Perhaps, so long as a man does nothing actually criminal, nothing for which he could be sent to jail, our "merchant princes" do not care by what means wealth is acquired.

Gentlemen, do you, or do you not, approve of the manner of the money gathered of the Law brothers?

In closing, we must apologize to our readers for printing in the Journal the excerpts from the publications of the Messrs. Law which we have made, for to us they seem salacious in the extreme.

As illustrating the extraordinary extent of the claims of the promoters, the one a life member of the Chemical Society and the other a director in the Young Men's Christian Association and a member of the faculty or directorate of the Hahnemann Medical School, San Francisco, we append a partial list of the various diseases which the published "literature" of the Viavi Co. states, either directly or by inference, that the Viavi system of treatment will cure:

The correction of improper or injurious pre-natal influences, curvature of the spine, spinal irritation, pain in the coccygeal region, paralysis of all parts of the body, amenorrhea, dysmenorrhoea, menorrhagia, metrorrhagia, congestive dysmenorrhoea, membranous dysmenorrhoea, flooding, versions of the uterus, inflammation of the ovaries, vicarious menstruation, non-development of sexual organs, chlorosis, epilepsy, metritis, subinvolution, all forms of inflammation of the womb, abdominal adhesions, leucorrhoea, all flexions of the uterus, prolapsus of the uterus, peritonitis, ovaritis, salpingitis, vaginitis, vaginismus, prolapsus of vagina, pruritis, cystitis of any variety, urethritis, caruncles, lax abdominal walls (ptosis?). used by the nursing mother it prevents disease of suckled infants, mastitis, miscarriage, sterility, prevention of lacerations, cure of laceration of the cervix, "external lacerations," cervical cancer, cancer of breast, etc. (Note—"Viavi Hygiene," page 366. "We do not wish it to be understood that the cure of cancer comes within the clinical range of the Viavi system of treatment. It is a fully established fact, however, that

the treatment has cured many cases diagnosed as cancer." (This seems to be so construed as to insure the complete delusion of the unfortunate incurable, or the sufferer who might be cured by early operation); tumors of all sorts and in all locations, hemorrhoids, prostatitis, orchitis, atrophy of the testicle, affections of the male generative organs not traceable to venereal diseases, nervous debility, neuralgia, headaches, insomnia, appendicitis, paralysis, paresis, locomotor ataxia, asthma, palsy, obesity, offensive breath, varicose veins and ulcers, catarrh, colds, nasal polypi, hay fever, deafness, bronchitis, pneumonia, consumption, dyspepsia, gastritis, constipation, diarrhoea, catarrh of the bowels, diabetes, albuminuria, abscess of rectum, fistula, prolapsus of rectum, sphincterismus, pruritis, stricture of rectum, cancer of rectum, rheumatism, lumbago, prevents inflammation and blood poisoning after serious injuries—"no necessity for amputations"—sprains, scalds and burns, infantile paralysis, incontinence of urine, croup, biliousness, skin diseases, earache, inflammation of outer ear, hardened wax, rupture of tympanum, inflammation of middle ear, eye strain, eye injury, conjunctivitis, granulated eyelids, iritis, ophthalmia neonatorum, pterygium, ozena.

ORIGINAL ARTICLES.

CYSTOSCOPY: URETERAL CATHETERIZATION: IS IT PRACTICAL? IS IT AN AID TO DIAGNOSIS IN OBSCURE DISEASES OF THE URINARY TRACT? PELVIC LAVAGE OF THE KIDNEY.*

BY CARL LEWIS WHEELER, LEXINGTON, KY.

Visual examination of the bladder by means of some instrument introduced through the urethra dates back as far as the beginning of the last century.

Bozziné, a German physician of Frankfurt-on-the-Main, as early as 1807 made numerous attempts to construct a cystoscopic instrument. It was very similar to an ordinary Klotz tube which was passed through the urethra into the bladder and reflected light into that viscus from without by means of a mirror. Of course a very small area of the bladder wall could be seen, scarcely larger than the lumen of the tube introduced, the illumination being very poor and defective.

Following Bozziné were Segalas, Fischer,

Desormeaux, Fürstenheim, and Crünfeld, and with the exception of some minor details their efforts were the same and likewise crowned with failures.

It was 70 years later when the great Nitze of Berlin solved the problem by introducing two new principles into the examination of the interior of the bladder; and as the result cystoscopy began to attract attention from all parts of the world.

The first principle was the illumination of a hollow viscus, connected with the exterior of the body by a long tube was only possible when the light was carried into that viscus itself.

The second principle was that a greater area must be seen at one view. Moreover he maintained, that if both principles be fulfilled, then by moving the instrument about, the whole surface could be examined.

Both were realized when it became possible to carry an electric light into the bladder without causing pain or injury—and to construct an optical instrument magnifying the field of vision.

The optical apparatus, somewhat similar to a telescope, was made by an optician named Beneche in conformity with the suggestions of Nitze.

The electric light was devised by Nitze and a Venecian instrument maker named Leiter. It was supplied by a platinum wire, heated to a white heat, which was covered by glass—both were contained in an irrigator which permitted a current of cold water to flow around them to prevent the heat produced from burning the bladder.

This arrangement rendered the instrument complicated and uncertain of application and it could only be used with difficulty, or not at all, and for this reason cystoscopy did not gain ready entrance to the practice of urologists and surgeons.

When the Edison lamp succeeded the platinum wire, the great obstacle was removed. This lamp was placed on the end of the catheter-like instrument instead of the platinum wire, the irrigator was discarded, as the lamp made a brilliant light and produced no heat. It was the beginning of a new era, cystoscopy was made practical and became the common property of the profession.

The cystoscopes of to-day are all modifications of the Nitze—each involving his two great principles, viz: 1st, light carried within the bladder, 2nd, magnifying the field of vision. Cystoscopes are divided into two classes, direct and indirect.

The direct is fitted with direct telescopic lenses, the indirect is fitted with a prismatic

*Read before the Kentucky State Medical Association, Owensboro, October 11, 1906.

lens or window, causing the image of field of vision to be seen at right angles to the shaft of the instrument, the latter is more preferable for a complete observation of the bladder.

Modern cystoscopes are 10 to 12 inches in length, terminating in a short beak 3-4 to 1 1-4 long, forming an angle of 145 degrees to the shaft; they vary in size from 16F to 30F. 24F 26F are the most popular size.

The best instruments on the market, of the direct type are the Winfield Ayres, F. Tilden Brown and Bransford Lewis. Of the indirect type, Nitze and Bierhoff, all of which are double catheter carrying instruments.

For observation purposes the Otis is worthy of note, having the largest field of vision. All of these instruments are constructed with an irrigating channel, therefore enabling the bladder wall to be seen under varying degrees of tension, and without removing the instrument—the bladder can be evacuated and refilled, should the fluid become turbid.

They are also provided with air attachment for distending bladder with air instead of fluid, used in cases where there is much hemorrhage, rendering the fluid immediately turbid.

Technique: Asepsis must be observed in the minutest detail. Patient removes all clothing from lower extremities and is placed on table in lithotomy position with buttocks projecting over the edge, thighs are slightly flexed on abdomen, legs are supported by the Bierhoff crutches which are attached to the table. The glans penis and meatus sponged with pledget of cotton saturated with Bichloride of Mercury 1-1000. If female, the vulva and urethral orifice are sterilized in similar manner. The hands of the operators are sterilized by the modern methods. The instrument and urethral catheters should be immersed for ten minutes in Oxyecyanide of Mercury 1-500, this solution is strongest antiseptic known and is absolutely non-irritating to the hands or mucous membrane of urethra or bladder—nor does it corrode an instrument.

The lamp must be tested before passing the instrument into the bladder, see that it burns with a bright white light—turning off current, the instrument is lubricated with sterile glycerine or lubraseptic, and is passed into the urethra similarly to an ordinary steel sound, and when the prostatic portion is reached, on account of the short beak the outer end of the instrument must be carried well down between the patient's thighs until the internal vesical sphincter has been clear-

ed, this is detected by cessation of resistance and ease of rotation or gliding movement slightly forward or backward. Withdraw obturator, allowing whatever urine may be in bladder to escape, irrigate with solution of Oxyecyanide of Mercury 1-5000 until fluid returns clear, allowing about 6 oz. to remain in the bladder.

Insert telescope, elevate patient's thighs to prevent fluid from escaping along side of instrument and thro' catheters, turn on your light and you are ready for observation.

There are no fixed rules for conducting an examination, this must be learned by experience. Using an indirect instrument and with the various manipulations, the entire bladder may be viewed, the instrument may be pushed in or slightly withdrawn, partly or completely rotated with slight perpendicular or lateralization.

As the base and trigone are most prone to pathological involvement this region should be viewed first, after that the posterior wall, at last the anterior and lateral walls.

The use of the cystoscope is indicated in obscure diseases of the bladder or kidneys when all other means have failed in establishing a diagnosis, provided the bladder can retain 4 oz. of fluid and the urethra is pervious to at least 22 to 26F. instrument. If urethra will not admit of such size instrument, then supra pubic cystoscopy through a canula may be employed.

Cystoscopic Appearances. The color of the mucosa of a normal bladder is a straw yellow. On its surface can be seen small vessels resembling the branches of trees, slight but distinct trabeculation, at the base you view the trigone, pink, in color, triangular in shape — appearing slightly granular, hence the term "The Sandy Shore of Fenwick." At the posterior border of the trigone you notice an abrupt change in color, this is called the inter-ureteral line. Following this line laterally to the angles of the trigone, as a rule locates the ureteral orifices. If they are not seen it may be due to insufficient vesical dilation, being hidden under the folds of the mucosa and therefore brought into view after obliterating these folds by proper amount of vesical tension, or their location may be abnormal, I have seen both openings to the right of the median line.

The ureteral orifices appear as a small slit or depression placed in a little ridge of the mucosa, or instead of this ridge there is a distinct conical projection making the opening. At intervals from 30 to 60 seconds there may be seen swirls of urine emitting from these orifices, their frequency depend-

ing upon the activity of the kidney.

In the diagnosis of cystitis the cystoscope is not required, although in the tubercular bladder the tubercles can be demonstrated long before the specific bacilli appears in the urine.

Ulcerations of the bladder may be supposed, the cystoscope reveals them as a fact.

The presence of vesical tumors may be surmised from the course of the disease, clinical symptoms may deceive us, sounding and palpation fail, the cystoscope tells.

For the presence of vesical calculi, sounds suffice in the majority of cases. It is well known, however, that there are stones which cannot be detected by the most careful examination, which are made clear by use of the cystoscope.

Foreign bodies, though rare at times find their way into the bladder and remain there, such as broken off catheters or bougies. Sometimes an object is introduced into the urethra with pleasurable intent and finds its way into the bladder, though the viscus may be tolerant for a time, cystitis soon develops, the urine becomes turbid and sometimes bloody, the cystoscope detects their presence and nature. Sometimes during an examination of the bladder and by bringing both ureteral orifices into view we are able to detect blood or pus in the swirls from one or the other or both orifices. In well marked cases differentiation is easy, but when the bladder is slow in becoming turbid pus and blood are present in microscopical quantities only then it is imperative to resort to the ureteral catheter.

Ureteral Catheterization. Ureteral catheters are made of silk covered with rubber, they are 27 to 30 inches long and vary from 5F to 7F in size, blunt or olive pointed, they come in pairs, usually one black and one tan, this distinguishes right and left and maintains their identity after the cystoscope has been withdrawn.

The Ayers tiger catheter resembles the other catheters in size and length. It has two eyes and is graduated in centimeters alternating black and tan, and at every 4 inches there is a band of red. It is very valuable in diagnosis, you can easily know the distance of the eye of the catheter from the ureteral orifice or even the distance from the meatus.

Catheterization is best performed through the direct view instrument, your vision is clear and straight in front of you, while through the indirect instrument it is somewhat confusing since you are looking at right angles.

The ureteral catheter is the most valuable

device we have to aid us in diagnosis beyond the ureteral orifice.

1st. By catheterization we obtain urine direct from each kidney uncontaminated by bladder, prostate or urethra, or if in the female, the genital tract, thus we are enabled to locate focus of any pathological process and determine its true nature, be it acute or chronic, gonorrhoeal or tubercular.

2nd. Compare functional activity of each kidney and its relative excretion of urea.

3rd. To ascertain if there is any congenital affections of the ureters or kidneys.

4th. To warrant the surgeon prior to a nephrectomy, that its fellow is present and capable of carrying on kidney functions.

5th. To diagnose and locate any obstruction of the ureter, whether it be due to stone, kink, stricture or pressure from intra-abdominal tumors.

6th. To diagnose presence of renal calculus, by passing catheter tipped with dental wax into the pelvis thereby receiving scratch.

Kelley reports 38 cases examined by this method of which number 5 were negative to the X-Ray, but positive to wax-tipped catheter.

Ayers reports favorably of this method, getting scratch repeatedly after passing the wax-tipped catheter in numbers of cases.

7th. To diagnose a pyonephrosis and ascertain if all kidney secreting tissue has been obliterated.

8th. Catheterization of both ureters as guide may be employed by the surgeon prior to abdominal operations, to avoid their injury.

Treatment. As the ureteral catheter has proven such a valuable aid in diagnosis we may now employ it as a means of treatment.

1st. To irrigate and medicate the ureters and renal pelvis in the treatment of ureteritis or pyelitis of either a catarrhal or purulent nature.

2nd. By dilating the ureter and injecting sterile oil we may facilitate the passage of a lodged calculus.

3rd. By continuous catheterization provoke the closure of a ureteral fistula.

F. Kreissl of Chicago reports in July number of Journal of Urology a case of traumatic ureteral fistula sustained during an abdominal operation. Closed by 13 days' continuous catheterization.

4th. By dilating a ureteral stricture, or a narrowing along the ureteral channel, or the straightening out of a kink, then with the flow of a large quantity of urine, under pressure with disappearance of tumor a di-

agnosis of hydronephrosis is established.

Pelvic Lavage. (Ayres' Method). Lavage of the renal pelves requires the utmost delicacy in handling the instruments, and the injections through the ureteral catheters must be made with patience and gentleness.

The time occupied in giving a lavage varies with different patients, those who have a tolerance for solutions in the renal pelves require about 15 minutes while patients with irritative or sensitive ureters require half an hour.

In the former cases the solution is thrown in slowly until there is a feeling of fullness over the kidneys. In the latter, only about one drachm should be thrown in at a time, in all about 2 to 4 oz. are used on each side.

Injections should be given at a temperature above that of the body, 105° to 110° F. seems best borne by the patients.

Drugs that have been of much service are Protargol, Argyrol, Nargol and silver nitrate 1-10,000 in satuated solution of Boric Acid.

If the ureters are very sensitive the patients may on first injection experience colicky pains, become nauseated and sweat very profusely. If this occurs it is best to remove the catheter and postpone lavage for at least one week.

A proper lavage of the renal pelves consists of repeated injections of small quantities of medicated solution through catheter that has been passed well up the ureters to the pelves. It is not necessary that the eye of the catheters be in the renal pelves, but within three inches of them. After each injection the fluid is allowed to flow out through the catheter before the second injection is given, this is done repeatedly withdrawing the catheters two inches each time, whereby you also irrigate the urethers clear down to the ureteral orifices, now completely withdraw the catheters, the patient is allowed to pass remaining fluid in the bladder, a Janet wash of silver is given and the operation is completed.

Conclusion. By aid of the cystoscope we are able to know the true condition of the bladder.

2nd. Knowledge of the work of each kidney means separate urine, this is only practical with the ureteral catheter.

3rd. To-day, with the plea for early diagnosis of renal tuberculosis, which means so much to our patients, it is only positive by ureteral catheterization.

4th. Lavage of the renal pelves is the only rational treatment of uretero-pyelitis barring the tubercular type.

5th. Lavage of the renal pelves will cer-

tainly cure a beginning nephritis that is due to extension of inflammation from the renal pelves. (Ayres).

DISCUSSION.

Dr. J. Garland Sherrill, Louisville: This subject of the use of the cystoscope and the ureteral catheter is receiving, at the present time, considerable attention at the hands of the profession. As stated by the essayist this procedure has many advantages, but it also has many disadvantages which prevents its use by the everyday practitioner in many instances.

In the first place, considerable skill is required to accomplish a successful catheterization of the ureters. Cystoscopy can be done with less practice and therefore less skill is required. Personally I have found that the development of the technic necessary to properly catheterize the ureters can be obtained only after considerable practice and the most careful attention. The first three or four cases that I tried to catheterize, especially in the male, were marked failures. Finally I became discouraged and this discouragement led me to think very highly of the men who were pioneers in this work. Each operator must work out his own technic to suit his cases. One operator prefers local anesthesia; another prefers general anesthesia. My work has been successful when I employed general anesthesia and had absolute control of the patient.

Catheterization of the female, as well as cystoscopy, has been more successful in my practice than that of the male. I can use a female cystoscope and get a direct view of the field. The metal catheter is handled easier in the female than is the soft instrument. If you use the soft instrument in the female you should put in a stylet in order to guide it properly because you have no carrier for it as in the male cystoscope.

Another point that gave me some trouble in my early work was that I would look too far back to find the ureteral orifices, the tendency being to push the point of the cystoscope back instead of keeping it in one direction near the trigone. This can be determined by the color of the fold of mucous membrane. It is a mistake to suppose that the ureters come in directly forward. They come in rather from the side over the brim of the pelvis.

As to the dangers of cystoscopy. In the hands of a bungler its use may prove dangerous. The bladder should be distended. Some operators prefer water, some air. I like to distend the bladder with air. This is more difficult in the male than in the female. The danger of carrying infection from the bladder into the ureter should never be overlooked.

The uncertainty as to whether you are in the ureter is great. You will find that if you are in the ureter the urine will trickle out very easily. I

agree with Mr. Morris who believes that in many cases there is temporary suppression of urine from the kidney on the side in which the catheter is inserted. Again, you may have a plug of mucous stopping the opening of the catheter. All these things must be borne in mind when attempting to catheterize the ureters.

Dr. Irvin Abell, Louisville: In my opinion the use of the soft instrument, or at least the silk woven catheter is likely to traumatize the mucous membrane of the ureter, more so than the metal catheter. I find also that the soft or silk woven instrument is introduced more easily than is the metal instrument. The dangers of the procedure are never to be overlooked, especially when attempting to make a diagnosis.

Infection of the kidney is always to be regarded as a serious impediment to the introduction of the catheter into the ureter, especially if it is to be used to wash out the pelvis of the kidney. The possibility of carrying the infection into the kidney structure is to be born in mind.

The sterilization and careful introduction of the instruments are always to be considered the most important feature about this procedure in order to avoid carrying the infection from the organ to another. The advantage from a diagnostic standpoint is great. The work on the kidney is more satisfactory if we know that its function is not impaired.

Dr. John R. Wathen, Louisville: I listened with a great deal of pleasure to Dr. Wheeler's excellent paper on this subject, and I regret that he did not devote more time to the discussion of the clinical features of this work. He devoted himself rather to the mechanical features. Of course, this field is, necessarily, to a large extent, mechanical, and it has been marked by big advances along this line. As he said, Dr. Max Nitze, of Berlin, was the first to popularize the examination of the bladder by means of light and prisms. Dr. Nitze and Dr. Fenwick, of London, who have done so much good work, based most of their work on the bladder. It is such men as Powlik, Kelly and others who have spent more time on the ureter and the kidney. Too much cannot be done in that direction.

Dr. Wheeler is enthusiastic about pelvic lavage and the examination of the kidney. This, of course, is very good, but it has been carried too far. In my own observations I have found this to be an extremely hard thing to do, to introduce the catheter into each ureter, and I am speaking from a fair experience in this line, dating as far back as 1899 when I catheterized the

ureters in a female in the Louisville City Hospital.

In 1903, before the American Urological Association, I reported 126 cases and I was able to report a successful examination of the ureters, where I introduced the catheter, in only about 19 cases, which, at that time, was considered a rather large percentage of successful cases, although to-day many operators claim a much better percentage. At the meeting of the same association in 1903 held at Atlantic City, I reported some specimens showing where a correct diagnosis had been made only by the cystoscope. Dr. Max Nitze published one of my cases in von Bergmann's surgery.

I am not in favor of the introduction of the catheter into every ureter. It is a dangerous thing to do, and as far as washing out the pelvis of the kidney is concerned, it is a most impractical thing to do with any degree of satisfaction. Ayres and others have advocated such methods.

As regards the use of the cystoscope, we must come down to the practical value of simple cystoscopy, looking into the bladder. Here is where we can judge its real usefulness, looking for stones in the bladder and for tumors. In fact, the greatest use of the cystoscope is in making a diagnosis of tumors in the bladder. That work is very valuable, and the simple cystoscope can be used by any practitioner, but catheterization of the ureters is very difficult and of little real value. Look at the ureteral orifice. Notice the condition and appearance of the opening and you can often make your diagnosis without introducing a catheter and it certainly is very much easier. Often you can see a little calculus just forcing itself out of the opening.

Dr. Dunning Wilson, Louisville: As a general practitioner I always take the opportunity of touching on the subject of the cystoscope. I think that many men who do general work are not getting in line with the instrument brought out for special work. I have used the cystoscope on a number of occasions and have been able to elucidate and diagnose a case which otherwise would have been obscure. I think that every physician should have a cystoscope. Of course, while it is true that genitourinary men and surgeons do most of this work, still there is no reason why the general practitioner can not, at least, make the diagnosis.

I believe that ureteral catheterization is the most helpful means for making a diagnosis of certain diseases of the kidney. I have seen a number of cases catheterized and I did not see any particular difficulty attending the procedure. I do not believe that pelvic lavage is sound as

yet. It seems to me that when it takes thirteen treatment to heal a ureteral fistula it is very unwise to introduce the ureteral catheter so often for the purpose of carrying out the treatment.

Dr. Wheeler, closing the discussion: I think that Dr. Wathen misunderstood me—I condemn indiscriminate catheterization of the ureters. I said when the fluid in the bladder is slow in becoming turbid and pus and blood are present in microscopical quantities only—not sufficient to be detected in the swirls of urine as it enters the bladder.

In these cases — the diagnosis is obscure and lies beyond the ureteral orifice—hence we must resort to the ureteral catheter.

Ureteral catheterization means separate urines. It is the only rational method of ascertaining the functional activity of each kidney—we are also able to make comparative analysis—both chemical and microscopical.

In regard to catheterizing the ureter thirteen times for the closure of a ureteral fistula—again I was misunderstood. I spoke of a traumatic ureteral fistula sustained during an abdominal operation. In course of a few hours temperature rose to 102 degrees—pulse 120—remaining so for four days—emesis being present all this time. On the third day following operation patient complained of intense pain in the right side. On the seventh day while dressing the abdominal wound—the dressings were found wet and had a strong ammoniacal odor—there was also found a urinary fistula in the abdominal wound.

A Genito Urinary specialist was summoned—he cystoscoped and found a normal bladder—a perfect working left ureteral os, but right ureteral orifice was gaping and motionless, with no urine emitting from it. He passed a number seven catheter into the right ureter and encountered an obstruction at four inches, but by gently gliding the catheter up and down the ureteral channel he succeeded in passing the obstruction and at this point obtained urine. The catheter was driven to the pelvis of the kidney and left **in situ THIRTEEN DAYS**. The pelvis of the kidney was lavaged thrice daily for thirteen days—the catheter was then withdrawn and fistula was found to be closed. A cystoscopy revealed normal right and left ureteral orifices with alternating swirling. Double catheterization for 24 hour specimens measured each 24 ounces of urine, making a total of 48 ounces.

Immediately after the catheterization dressings remained dry and without urinary odor—abdominal fistula closing at once.

PLEURO-PNEUMONIA FOLLOWED BY PULMONARY ABSCESS.*

BY JOHN G. CECIL, LOUISVILLE.

Dr. W. P. W. age 63, well and favorably

known to the medical profession of this city, for many years Health Officer of the City of Louisville, a man of vigorous constitution and previous good health, was seized April 22nd, 1906 with a severe chill, a rapid rise of temperature and pulse, shortness of breath, and pain of violent stabbing nature in the region of the left nipple. On the day of invasion and the day following, on his own prescription he took fifty grains of quinine. Fashioned in the mold, and built of the stern stuff so characteristic of the Confederate veteran, the Doctor could not get his own consent to being a sick man and did not ask for assistance until the third day of his attack. I found him at his hotel lying on the bed, partially dressed, an anxious expression and evidently suffering not a little. A hurried examination convinced me of the nature of his attack, an hypodermic of morphine was at once administered, he was placed under the care of two most excellent trained nurses and we entered upon the management of a well-defined attack of pleuro-pneumonia. The center of the attack was in that portion of the pleural sac beneath left breast, adjacent to the pericardium and in the anterior and lower portion of the upper lobe of the left lung. The classical signs of pleuro-pneumonia were all present—the pleural friction rale, the bronchial breathing, the crepitant rale, the dull percussion note over the affected area, the brick-dust sputum. The sputum, however, throughout the attack in its acute stage, was very scant and often exhibited no blood stain. The respiration was rapid from the beginning and continued so during the attack. There was nothing unusual in the behavior of the temperature and pulse rate. Fever to the degree of 104° was noted on several days, the pulse rate as a rule was commensurate with the temperature. The pneumonia was migratory in character and before the attack was done with it invaded every portion of both upper and lower lobes of the left lung. The pleurisy was of the dry plastic variety as at no time in its course was there an appreciable effusion. The treatment adopted was simply palliative and supportive. Opium in some of its preparations being freely used whenever demanded to allay pain. Likewise whiskey and strychnine were used constantly *pro re nata* after the first few days.

On the 7th day after the attack the apex beat of the heart was noticeably displaced downward and to the right, for a while the impulse was heard and felt most distinctly at the left xiphoid notch. The pulse became irregular and intermittent and the heart

sounds were muffled and far away, a pericardial friction rale appeared, was heard for a day and disappeared. Dyspnoea was marked. This was interpreted to mean pericardial effusion and a pretty active catharsis was induced by repeated doses of Hunyadi. The result was satisfactory and very soon the normal action and sounds of the heart were observed. The heart continued, however, to occupy, in some degree, an abnormal position downward and to the right, especially the latter: the reason for which will appear later on as we proceed with the history. The diet in the meanwhile was most carefully appointed, consisting solely of milk and meat-broths.

About this time, the eighth day, the crisis was most anxiously and hopefully looked for. Profuse sweats were seen, but the temperature continued high and the other symptoms did not abate. Days passed and the crisis did not come. The delay was ascribed to spread of the process, as day by day new areas were involved. I am sure every stage of hepatization known to pulmonary pathologists could have been demonstrated at this time in this lung. Now all the symptoms were bad and hourly growing worse, delirium was active and constant, the pulse rocky, intermittent and feeble, respirations in the fifties, the color bad, the features pinched, all but the facies Hippocratica present and the outlook gloomy indeed. Gradually there was a general amelioration of symptoms and the hope for a favorable termination by lysis was entertained. Two weeks had now passed, the fever lessened, but did not leave, the pulse was better, profuse sweats were constant, the respiration continued rapid and more or less labored, cough was harrassing, more so than it had been at any time and was of paroxysmal character. Finally on the 20th day from the beginning, and fortunately during my usual morning visit, an unusually severe paroxysm of coughing ruptured an abscess and in the course of a few minutes more than a pint of yellow greenish purulent sputum, offensive in odor was expectorated and when the cavity was emptied, the patient was on the verge of complete exhaustion: the danger from suffocation had certainly been imminent. Here then, was the cause of delay in termination and also the explanation of the continued downward, and to the right, displacement of the heart. After the abscess had emptied itself all the characteristic signs of the cavity could be easily made out. The abscess had developed a little below the point of original attack. A day or so later another violent spell of coughing resulted in the ex-

pulsion of about one-half a pint of sputum of a different color and appearance, the conclusion being that another abscess had broken into the cavity of the first. From this time on progress toward recovery was, while beset with many backsets and difficulties, ever forward.

The fever now subsided; indeed subsided too much, as it was persistently below normal, except when there would be a blocking of the fistulous opening into the bronchus, the purulent sputum retained, the fever would rise. Immense quantities of purulent sputum were thrown off, fully six weeks being necessary to close the abscess cavity. Five months have elapsed and our worthy patient finds himself in a condition which we fondly believe is full of hope for the future. He eats and sleeps well, has no fever, has gained nearly all his flesh he lost, still coughs some, expectorates a frothy bronchial mucus, gets short-winded on slight exertion.

Tyson. Croupous pneumonia may rarely terminate in abscess. About 4 per cent. of fatal cases. Flint, Jr., found it in 4 out of 133 cases. Diagnosis—"signs of second stage continue, temperature does not fall, crisis does not occur." "Signs of a cavity which might naturally be expected, are rarely present, and it is rather by the general symptoms, viz., the failure to recover, the continued high temperature, the expectoration of pus often of intensely disagreeable odor, that we are informed of the issue."

Anders. Abscess as a termination of croupous pneumonia is to be attributed to subsequent infection by streptococci. The abscesses vary in size within widest limits most frequently are situated near the base of the lung, may however, occupy the periphery. In most instances the abscess cavity has a fistulous connection with a bronchus, occasionally may become encapsulated in fibrous tissue, the contents undergoing first caseous and then calcareous degeneration. Rarely they open into the pericardium and still more seldom externally. When they occupy the periphery the rupture is prone to occur into the pleural sac, causing pyo-pneumothorax. They may be small and multiple, in which case they sometimes coalesce and form a large abscess-cavity. The sputum under microscope will show particles of lung tissue, the elastic fibres which is of great importance in diagnosis. The sputum is purulent, usually presents a yellow or less frequently a greenish or brownish yellow, color. The fetor is less pronounced than that of gangrene or putrid bronchitis or cancer of lung. The physical signs of a cavity are of greatest as-

sistance in diagnosis; these, however, are wanting unless the abscess cavity is of a considerable size, of course the history of an antecedent pneumonia in a suspected case is strongly corroborative. "When abscess is near periphery surgical interference is to be advised as soon as the first indications of increasing weakness appear." The statistics of Eichhorst, in *Specime Pathologis*, showing its favorable results are as follows: in 13 operations, recovery or improvement was rated in 6, while fatal terminations occurred in 7.

Asar. Lobar pneumonia terminated in abscess in 4 of 100 autopsies. The condition is recognized by the sputa which is usually abundant and contains pus and elastic tissue, sometimes cholesterin crystals and haematoidin crystals. Abscess following pneumonia, is easily recognized by an aggravation of the general symptoms and by the physical signs of a cavity and the character of the expectoration. Recovery occasionally occurs after pneumonia. Medicinal treatment is of little avail in abscess of the lung when well-defined and superficial, an attempt should always be made to open and drain it.

DIABETIC GANGRENE.—A CASE IN PRACTISE.*

BY CECIL L. HUDGINS, OLIVE HILL.

In presenting this subject and case, it is not my purpose to offer anything new or strange; but solely with the hope that it may elicit free and full discussion by my conferrees, as the case was very interesting to me, and the first one to fall to my lot.

Gangrene means death of tissue, in visible and more or less circumscribed masses. Among the constitutional causes we will mention particularly that symptom complex, ordinarily known as Diabetes Mellitus or Glycosuria. It is notorious that this means a depraved condition of the system in which gangrene is threatened or permitted, under circumstances which otherwise would have little or no disastrous effect.

Thus Diabetic Gangrene has come to be one of the recognized manifestations of the general subject. In a general way tissue death, known as gangrene assumes two quite opposite types, the moist and the dry. It is the moist type with which we have to deal.

In moist gangrene aside from the general appearances, which plainly indicate commencing putrefaction of tissue and the loss of heat, due to the shutting off of the blood

supply, caused by the arterio-sclerosis.

The patient, a man of 60 years old, having been during the past twenty years a heavy drinker of raw spirits, consuming two or three pints of proof whisky every twenty-four hours.

During the past five years known to be a victim of Diabetes Mellitus, having more than once eliminated by the kidneys, six ounces of sugar in twenty-four hours.

The first week of July, 1906, he began complaining of severe pain in his left foot and leg; described the pain as burning in character, and that the limb felt as he imagined it would if immersed in boiling water.

The leg and foot were cold to the touch, slightly swollen and pallid. Congestion and swelling within a few days became marked features, the pallor giving way to a dusky red hue, which rapidly became grayish, which deepened into a greenish black color.

The skin and subcutaneous tissue became infiltrated with fluid and gases, giving a doughy feeling upon pressure, and the peculiar crackling of emphysema, serum and hydrogen in their efforts to escape were at various points caught under the impervious epidermis, which was lifted up in blisters.

Following the phenomena above detailed putrefaction changes were rapid; the soft parts dropped away in offensive sloughs, up to and involving the knee, and popliteal space.

The condition of the patient at this period was pitiable in the extreme. Jactitation, anorexia and prostration were marked. The fever heretofore having shown a deep morning remission, now became continuous, increased, terminating in hyperpyrexia.

The treatment was as follows: limb bathed thoroughly with peroxide of hydrogen, dusted with iodoform, and enveloped in gauze saturated in Bichloride of Mercury 1-500. The internal remedies were cardiac stimulants; opium to relieve pain and palliate shock. The alcohol was never withdrawn.

Beef juice and the careful combination of those articles of food which were acceptable to the patient, and known to be rich in nitrogen were given freely. The disease made rapid progress.

The patient died of hemorrhage, probably from the posterior tibial artery, September 21st, 1906.

*Read before the Kentucky State Medical Association, October, 1906.

OUR COUNTY SOCIETY.*

BY B. G. ALLEN, SOMERSET.

It is with no small amount of misgiving and lack of confidence in my ability to write a paper, that I undertake the presentation of this address. After listening to the able salutatory oration of my predecessor, although it has now been a year, and also to his closing words when the hour for his retirement arrived, I feel most keenly my incompetency to offer you a few remarks that will be worthy of your consideration. However, burdened as I may be with this task, I wish to extend to this Society my sincere thanks for the honor you have conferred upon me, and beg you not to measure the discharge of my duties as your President for the ensuing year by the few words I will offer you on this occasion, but to practice towards me that greatest of all virtues, Charity, and let us all renew our intentions and redouble our efforts to improve our little county organization and rank it where it can be and where it should be, one of the foremost in our State. I realize only too forcibly that my contributions to the Society during the last year have done little to promote its welfare, but now having given you this much of a confession I am going to offer this body my earnest vow that nineteen hundred and seven may expect and will receive more of my efforts than it has been my custom to accord its predecessors. The present Pulaski County Medical Society has outlived, by many years, any of the societies bearing the same name which have preceded it, and search as you may you will discover no signs—apparent or otherwise—of decay.

To-day it is a full-blooded individual of hearty habits, well nourished, having a strong, full, and normal pulse, and, in all, bids fair to live as long as ever humans will be allowed to practice the noble art from which it derives its honored name. The excellent condition our County Society is enjoying to-day is due largely, I believe, and I feel sure that all of you present will uphold me in this belief, to one of our members in particular, one who has been very solicitous about its welfare from the very beginning and all along, and one who proved himself a proficient and patient nurse in caring for and raising this infant through many months of fretful teething and all the disorders that infants fall heir to, and after months of tedious labor and perseverance, we to-day look upon a fully developed and hear-

ty adult, filled with that vim so needful in our present age.

The county organization is the life, the very back-bone of our State and National societies, and our Pulaski County Society forms one of the many roots from which these larger fellows derive their sustenance, and I assure you it is not one of these smaller roots either, and ere long we must, we will be accorded positions in the medical world which are now occupied by our much older, stronger and more experienced rivals.

We have the material here to accomplish this, and we have push and energy, but we need more push, more energy, and more of that determination so characteristic of our forefathers who did so much to start medicine and surgery on the road we find it traveling to-day, and these and all the rapid developments in our growing and thriving city should be an incentive for us to waste no time, but to push on and ere long, even before we are aware, to reach that coveted goal. While we, as a profession, are unable to point with pride to any new and wonderful medical discoveries or surgical achievements, such as would rank with vaccination, chloroform, diphtheria anti-toxine and asepsis, during the last year, it is a self-evident fact that we have all learned much, that we have made advances and improvements in many minor ways, and when it is all summed up to our credit it will be found that we have learned much, have done much to promote our own welfare and the welfare of suffering humanity. This proficiency in details is what makes competent doctors. To accomplish this we must study, study not only in our offices, but particularly at the bed-side of our suffering patient. You will always see the thorough and pains-taking physician giving each patient all that is due him when sitting by his sick-bed endeavoring to find the disease and the remedy. Of course this will require time and patience on our part—such virtues, I am afraid, we all do not possess to the degree we should. But if we will only try we can form a habit along this line that will be a good one. And in speaking of habits there is one habit in particular that will commend itself to every physician, young or old, viz.: the study habit.

We all have habits. Some good, some bad and why not adopt this one? Did you ever stop to consider what might be accomplished, what might be learned by pondering over your books just one hour each day; how many days' study this would mean in each year? We can all spare this much time, I know. Now it is to the younger members in

*Incoming President's address delivered before the Pulaski County Medical Society, February, 1907.

our profession, those just starting on this long and rocky road, that I especially urge the adoption of this study habit, for if not begun while young it probably never will be and it is a habit that will bring you more rewards than any one you can indulge in, rewards not only to yourself, but also to your patient. Also to you young members would I recommend the practice of writing the history of each of your cases. This will do much towards assisting you in bringing out the symptoms in each case and in arriving at conclusions you could not otherwise reach if you did not have a history laying before you. The busy practitioner may feel that he cannot spare the time to write up these histories, but if he will his time will be well spent. Let me urge the young man when starting out in his professional and public career to be ethical and honest. Never allow yourself to get away from these. Carry them through life with you as charms of great value. Let your code of ethics be the first book you purchase and keep it always in the front row in your book-case. Others may not read it, or if they do, fall short of its teachings, but never let this be charged to you. It is one of the noblest traits in our profession. Remember what the 9th Commandment teaches you.—Not to covet thy neighbor's goods,—and when we apply this commandment in our profession it means we must not covet our neighbor's patients. Despire every unfair act that may degrade you in the estimation of your rival and the public. Be charitable to all, but especially to the poor, the ones who need all the charity we can bestow upon them. Just now we are in the midst of a great conflict with a number of the insurance companies. While our profession represents the only branch of these great and powerful corporations to come out of these rigid investigations without the least evidence of mismanagement, yet the managers of these companies are attempting to shoulder their sins on us and are punishing us in a vain effort to more securely cover up their own wrongdoing. In this attempt they have unjustly lowered the standard of our compensation and by so doing have degraded our profession. It seems that it is a case of "misery loves company" and they are attempting to make us share in the punishment. But our profession cannot, will not stand for such treatment long, and there is now a revolt among us that will most surely be felt.

It is up to our physicians and I feel confident that no member of this Society or of the profession in this county will henceforth be guilty of making one of these examina-

tions for a less fee than the old-time one of five dollars. If we are successful in this fight we will not only secure a protection to ourselves, but also to the many thousands of policy-holders of which we are a few, for if the doctor is better paid he will render better service.

These companies will soon realize the situation and must know that they cannot entrust this important branch of their business to incompetent examiners, for it is the able and conscientious physician who stands guard at the very threshold of these great and powerful corporations and they cannot get along without us. I am glad to say that much has already been done to right this wrong, and we confidently anticipate a complete and decisive victory in the future. At present our own State, Kentucky, seems to be leading all the other States in this move. But to make our success more certain in these fights against greed we must get united and remain so, and this I feel that we are in Pulaski County. If just one of us should refuse to join in this crusade, if there is one bolter, then all we have done will have been done in vain. The time is coming, aye, I may say it is here now when our profession will have to be more united than ever to protect our own interests. If you will only stop a moment to investigate you will find it to be a fact that most every corporation is looking for cheap doctors just the same as they are looking for cheap and cheaper labor in all of their departments. You will find that the corporation physician is very poorly paid. What a contrast with the corporation lawyer, and who is to blame for this? No one but the physician himself.

Our organization in the county is becoming stronger and may we expect more from a united effort in the future.

I have the pleasure of telling you that during the last year our Society has been superbly officered by both our President and Secretary. Especially has the latter performed his arduous duties well, and much credit is due him for those excellent services. May he do as well this year.

This is the most important office in the Society, and to have a good Society we must have a good and efficient Secretary. One who will put his whole heart in the work and attend strictly to the secretary's business. One who will let his own affairs go unattended to rather than miss a meeting, knowing well the importance of his presence. Our program for last year was well arranged and quite an attractive one. Though all the papers were not prepared, yet we had sufficient for discussion and edification at each meet-

ing. Let us hope they will be more numerous in the future. The arrangement of a yearly program constitutes a very important feature towards insuring good papers and successful meetings and a feature that should commend the careful and earnest consideration of its committee.

In the past we have found that reporting our clinical cases has been of great help to us and I earnestly urge the members to more carefully and thoroughly report these cases, for it is these little heart-to-heart talks on subjects fresh in our minds and often puzzling, that we will derive so much good from, will be of mutual benefit to all of us and will always put more life in our meetings and therefore make them more interesting.

And now disclaiming any expectation of having entertained this audience, in even a small degree, but feeling that I have partially and feebly fulfilled my obligation, I will now bring my remarks to a close, and in conclusion would like to remind our Society how well and wonderfully we have been blessed, for in looking over the list of our members we see that the Grim Reaper has not visited our ranks since our organization. May his visits continue to be as infrequent.

And now, glorifying over our past, let us look to the future with even brighter hopes, brighter prospects, and continue to strive on with renewed and increasing energy to find new fields for exploration and development.

APOPLEXY.*

By H. K. ORSBURN, OWENSBORO.

The term Apoplexy is very indefinite in its literal sense. It has been and still is used in several ways, but is becoming more and more limited to the sudden or gradual insensibility due to the effusion of blood or serum into the brain and spinal cord. It does not signify a specific disease, but it is an affection the result of various morbid conditions of the body causing a weakening and rupturing of the blood vessel walls of the central nervous system. Cases sometimes occur in which unconsciousness is two or three weeks coming on, but these are very rare. The hemorrhage may take place anywhere within the skull, but the seat of most frequent hemorrhages is at the circle of Willis. An effusion in this portion of the brain dissects up the nerve fibres and destroys the neurons, leaving a ragged space filled with clot and fragments of gray matter. In slight effu-

sion the blood may only cause separation of the nerve fibres, and the clot may occupy one or several small spaces. The clot becomes lighter in color, its contents converted into a cyst by fatty degeneration, and by inflammatory reaction a wall is formed around it. If the cyst is large it may remain as such, if small, connective tissue, may form and a scar result. The next most frequent seat is from the cerebral arteries and their subdivisions. The flow of blood from these vessels is in the meninges and does not cause a tearing up of the brain tissue, as from the circle of Willis, but produces compression of the brain. The blood is usually effused in the meshes of the arachnoid or outside of this membrane following along the sulci. The next in order of frequency is from the middle meningeal artery which pours out blood between the bones of the skull and duramater. as the result of violence, or the misuse of the trephine when this vessel is imbedded in a canal instead of a groove.

Hemorrhage may come from the ventricles of the brain. It may come from the veins, but rarely, and when such occurs is usually due to rupture of the venous walls by trauma or the extension from some neighboring focus of disease to the vessel wall. A thrombus in a vein may cause a damming back of blood and result in rupture of an artery or of the capillaries between the vein and artery.

Miliary aneurisms are very common, and in many instances have been found to rupture. These aneurisms are usually at the base of the brain and in the terminal branches proceeding from the circle of Willis. They occur in the aged, very rarely in the young, while after forty they are not uncommon. These aneurisms are diffused more or less widely over the cerebral arteries, but not over the rest of the body, and are due to periarteritis. Rupture of the atheromatous vessels are due to endarteritis, and occur in the opposite extreme of life, and may cause apoplexy in those who are apparently healthy. This form of arterial degeneration has only been found in the circle of Willis.

Fatal hemorrhage may take place from the lateral sinus as the result of a blow on the head. An injury at this place, either with or without fracture of the cranial bones, is likely to cause rupture of the cerebral substance with hemorrhage, and this may find its way to the outside and cover more or less of the surface. Clots have been found in the two lateral and third and fourth ventricles at the same time.

Coats stated in the Glasgow Medical Journal in 1882, "that aneurism of the larger ar-

*Read before the Kentucky State Medical Association, October, 1906.

teries was the most frequent source of hemorrhage in persons under fifty. They may be due to embolism, producing, when the occlusion is not complete, mechanical injury to walls of the vessels by the constant hammering upon them of the embolus under the impulse of the blood." I have seen a case I took to be produced by this condition in an old man. One year ago a gentleman 82 years of age had suffered from rheumatism and was ill a month or so, when recovery took place. Immediately following upon this came a weakness of the leg and arm of the right side, slight in the beginning. When he walked he did so with difficulty. This progressed slowly and regularly, involving the tongue finally, when death relieved him in about three weeks. This case with the attending circumstances puzzled me greatly at the time, not being able to decide the real cause of his apoplexy, since the text books teach that embolism or thrombi occur in persons under fifty usually, and that rupture of the cerebral vessels from diseased arteries come in persons beyond that age; but considering the fact that it supervened immediately upon an attack of rheumatism I am forced to the conclusion that it was caused by a clot dislodged from the heart and probably being carried to the middle cerebral artery and lodged about one of its first branches, and by the hammering of the clot against the walls of the vessel by the impulse of the blood stream causing the coats to yield, produced extravasation at the base of the brain. This was a typical ingravescient type of the disease. Emboli, in my opinion, causes a large proportion of these cases, inasmuch as a great many old people suffer from rheumatism.

The hemorrhage may be profuse and the extravasation so great that nearly the whole of the brain may be compressed or the neurons so torn and their function so destroyed as to cause paralysis of both sides of the face as well as all four limbs. Again it may be so small that symptoms are not manifested, or if so, to a very slight extent. Another case, a man of about fifty was seen by another physician and me last summer who had some numbness of the right side and some digestive disturbance. At the same time he became somewhat aphasic. These symptoms, however, were transient. Previous to that time he had had obscured vision and was treated by another physician and advised to have his eyes tested and to wear glasses, which he did, but with no relief. He then made several examinations of his urine, suspecting some kidney trouble, but with negative results. He was then discharged. We

saw him afterwards and our diagnosis was slight hemorrhage with threatened apoplexy. This man, so far as I know, has had no trouble of that kind since. From the symptoms he presented he had a slight hemorrhage at or near the corpora quadrigemina and the third frontal convolution, probably from rupture of miliary aneurisms, the clot from which became cystic and was then absorbed. Most cases come after fifty, but many occur at any age. The youngest case on record, so far as I am able to find out (except in injuries from childbirth), occurred in an infant ten days old in the Philadelphia Hospital some years ago. This hemorrhage took place in the meninges, and in all the ventricles, which were filled with blood. Certain atmospheric conditions, producing arterial tension and consequent increased force of the heart's action, seems to be a factor in causing a prevalence of intracranial hemorrhage at particular times.

The general causes leading to sclerosis and atheroma of the blood vessel walls, the forerunner of idiopathic cases are: The abuse of alcohol, chronic interstitial nephritis, where the kidneys are contracted, granular, cirrhotic, or atrophied, and the heart is secondarily hypertrophied, and prolonged muscular exertion, infectious diseases, such as malaria, rheumatism, syphilis, etc., in which their micro-organisms, partly by their direct action and partly by increasing the resistance in peripheral vessels, raise the blood pressure, and in this way lead to rupture of the vessels. The chemical irritants of lead-poisoning and the uric acid in gout will, in the same way, produce this condition of the vessel walls.

The attack usually comes on suddenly and without warning, in other cases there are premonitory symptoms, dizziness, headache, numbness of the extremities of one side, mistakes in talking or writing, irritability. In the mildest apoplectic attack the person suddenly falls, or rather slowly drops down, is confused, but may not lose consciousness; or if he does, it is only momentarily, there is more or less paralysis of one side. In the more severe attack he loses consciousness, falls, breathes heavily, face flushed, dusky, and swollen, profuse perspiration breaks out all over the body, the respiration becomes puffy, in the worst cases of the Cheyne-Stokes type; the arteries throb; the conjunctiva is injected, and the lids closed. If the lesion occurs in the lower part of the pons the facial paralysis comes on the same side as the lesion. When the limbs of the paralyzed side are picked up they fall heavily

when let go. Immediately after the attack the temperature is low, and if death does not take place soon, there is a rise of temperature; if the condition does not progress favorably the temperature may reach 106 or 108 before death. In cases that do progress favorably the fever subsides to the normal. In all severe cases the eyes and head turn from the paralyzed side to side of the lesion unless the hemorrhage is in the pons, when they are turned toward the paralyzed side and from the side of the lesion. The arm, leg, and lower facial muscles are paralyzed.

If the lesion occur on the left side, there may be aphasia. If the person recovers sufficient to walk about, the paralyzed muscles become stiff (early rigidity); this early rigidity gives place to a certain amount of contracture (late rigidity).

Extensive hemorrhages do not recover. Cases in which the temperature remains permanently low or runs very high seldom recover.

In most of the few cases I have seen, I have found no treatment of any avail. Nearly the same plan of treatment is laid down by the text books generally, which I have always followed. It consists in loosening the clothing, perfect quiet, and elevation of the head. I have seen one exception to this routine treatment and this is by A. A. Smith, late professor of materia medica and therapeutics in Bellevue College. He has recently suggested depressing the head and raising the lower extremities and trunk, so as to cause rapid flow of blood to the brain, with the idea of rapid coagulation of extravasated blood, and closure of the vessel. He has also proposed lowering the arterial tension by the use of inhalations of nitrate of amyl, nitro-glycerine by the mouth or hypodermically, Gelsemium and other vascular depressants. This unique treatment by Dr. Smith was suggested on theoretical grounds, and his theory has some semblance of truth about it. I think, in desperate cases, where there is no hope of obtaining any relief from the old plan of treatment, this plan is well worthy of trial, and I shall be tempted to use it in grave cases. Returning to orthodox treatment, ice should be applied to the head, hot bricks or hot water bottles to the feet, mustard plasters to the neck. Give one or two drops of croton oil to move the bowels, sometimes more will be required. When consciousness returns the patient must be kept perfectly quiet for several days and fed on liquid diet. Later the tone of the muscles must be kept up by massage and electricity.

COUNTY SOCIETY REPORTS.

Anderson.—The Anderson County Medical Society was called to order by President Pindar. Dr. Johnson was on the program for a paper on "malaria," but was unable to be present. Dr. Toll gave an interesting talk on some of the manifestations of malaria. He called attention to the large percentage of cases of supraorbital neuralgia that were of malarial origin, and which yielded to anti-malarial treatment. Dr. Toll also called special attention to the post-malarial condition of indigestion accompanied by sour stomach, and also torpid liver. It was his opinion that quinine did not benefit this class of cases but that they could be controlled by use of mineral acids and close attention to diet. He did not use quinine in the aestivo-autumnal type of malaria, nor as a factor in differential diagnosis between this type of fever and typhoid, but relied largely on the fact that in this form of malaria you find tenderness over the stomach, while in typhoid fever the point of tenderness was over the lower part of the bowels.

Dr. Paynter, in discussing the treatment of malaria, said that he did not believe that quinine would always break up malaria of the remittent type, but that he relied more on the use of Warburg's tincture.

Dr. Kavanaugh said that most physicians were prone to call all conditions of malaria and fever, malaria. He believed that the microscope should be our reliance in differential diagnosis between remittent fever and typhoid. Quinine is considered and rightly so, a specific in malaria, but does not act as quickly in some forms of malaria as it does in others. In the remittent form the plasmodia are distributed throughout the body, and as the quinine is not readily absorbed it does not reach them. Always use quinine except where there is an idiosyncrasy. Give the calomel as often as necessary and use the bisulphate of quinine in connection with some of the mineral acids.

Dr. Milton said in his opinion this so-called malarial form of supra-orbital neuralgia, follow cases of malaria that have been suppressed by quinine and much damage is done by the indiscriminate use of quinine. He called attention to the fact that in these post-malarial derangements of the stomach the food will lie in the stomach a long time without fermenting. In discussing the etiology of malaria, he said that he believed that decaying vegetable matter was the cause of malaria poison, and that it was transmitted by the mosquito. In closing his talk Dr. Milton told of an interesting case that came under his observation in which the curative agent was chloride of sodium.

This was the original case of malaria, and

some intuitive person, knowing that this disease was going to be called malaria (bad air), reasoned from cause to effect and saw that the "bad air" was coming from his feet, ordered the patient to put chloride of sodium in his socks and thus destroy the cause of the bad air. Before the patient had recovered, numerous mosquitoes came to this supply house and took away plasmodia of various kinds to scatter amongst humanity the world over. They quickly learned, that after inserting the poison into the prospective patient of some doctor, to get their "bills" out immediately. The doctors have not been near so successful with their "bills."

Dr. Lillard said that the original source of no disease could be traced, but believed the mosquito to be the causative factor in malaria. He believes that quinine is a specific in malaria.

Dr. Murdock said that he did not believe in the mosquito theory as regards malaria, and cited several instances where there were marshes and low-lands and no mosquitoes, but plenty of malaria. He said that he had never had much success with quinine, but relied chiefly on Tr. chincona and Carbonate of Soda.

Dr. Toll, in closing the discussion, said that he thought quinine did the most good when there was a distinct preiodicity, quinine being an anti-periodic rather than a specific in malarial conditions.

Dr. Crumne was on the program for a paper on "Diagnosis of Typhoid Fever," but was absent.

Dr. Kavanaugh then gave an interesting talk on typhoid fever. Woodbridge treatment, he thought, was detrimental in all cases of the typhoid. He then spoke at length on the complication of "milk leg," in typhoid fever, believing this often arises from straining at the stools as a result of constipation. He said that he had no abortive treatment, but had plenty of medicines that would harm, and that a good rule to follow was "if you can do no good, do no harm." High temperature does not the amount of harm we once thought it did. Low temperature sometimes is a bad indication. He condemned the practice of leaving thermometers in the hands of inexperienced nurses, and the society all agreed with him on this point.

Dr. Paynter thought that too much medicine was used in this disease; as a rule, he was in favor of the expectant treatment.

Dr. Toll said he had tried the Widal reaction, but did not sufficiently be prepared to give an opinion as to its efficacy. He said that he did not depend on the rash, as a diagnostic sign. He found that morphine was absolutely necessary sometimes to give rest. He also stated that every case was a case unto itself, and

we had to use the expectant treatment.

Dr. Murdock does not depend on the rash for diagnosis. He uses caffeine to produce rest; it makes the skin and kidneys active. He said that in nearly all of his cases of typhoid he had noticed that there was in the beginning a pain in the Occipital region, pains in the calves of legs and a red border around the edge of the tongue.

Dr. Lillard said that he always looked for the rash in typhoid fever as he did in measles. He said that he treated his patients expectantly, but did not advocate the routine use of milk as a diet.

Dr. Milton said that this pain in the occipital region was always present at the onset of the disease, but was not pathognomonic, he had never seen but two cases with the rash. He paid little attention to the temperature, but that all the cases that he had seen with continued subnormal temperature died. He said he had never seen a case of typhoid die where constipation was one of the main symptoms.

As to diet his rule is to give them anything to eat until they vomit. He used plenty of water.

Dr. Pindar said that he wanted to report a case of typhoid fever that came under his observation. At 9 o'clock the temperature of the child, aged 5, was 103°, at 1 o'clock it was 108½°; various methods were used to reduce the temperature, but the ice pack was speedily resorted to and by 1:20 the temperature was 97°. The child eventually recovered.

Meeting adjourned to meet in office of Dr. Toll on the first Monday in May.

J. W. GILBERT, Secretary.

Bath.—The Bath County Medical Society convened in the K. of P. hall April 8th, 1907, at 11 A. M., with A. W. Walden, President, in the chair. The following members were present:—I. W. Jones, B. Cornelison, A. W. Jones, W. S. Reeves, N. T. Clarke, J. K. Wells, J. H. Taulbee, F. P. Gudgeall, J. M. Felon, A. W. Walden, and H. J. Daily.

Minutes of previous meeting read and approved.

It was moved and seconded that the chair appoint a committee to confer with the K. of P. Lodge to make arrangements for their hall as a permanent home for the Society. F. P. Gudgeall and Dr. Daily were appointed.

Clinical Reports: J. M. Felon reported a dislocation of the patella in a very fat woman. She gave a history of a hurt New Year's day and a fall a week later. On examination patella could not be located, but under an anaesthetic it was found to be downward and inward. Used adhesive straps and figure of eight bandages.

The case was discussed by Drs. Gudgeall, Taul-

bee and Walden.

Drs. Taulbee and Walden reported a case in a man 52 years old, was first seen on March 11, had a knot on back of arm below elbow, erysipelas in character, fresh invasion every three or four days and extended over arm onto back and into axilla, frequent abscesses formed which were opened, gangrene of skin set in extending up arm to back and axilla with sloughing of superficial blood vessels. Pronounced systemic symptoms, fever $105\frac{1}{2}^{\circ}$ F. Used Antiphlogestine and then itchthylol ointment 30%. Patient very much improved.

The chair appointed the following members to bring in papers for our next meeting:—J. M. Felon, F. P. Gudge, and H. J. Daily.

The following paid dues for 1907: — S. K. Wells, B. Cornilison, W. S. Reeves, N. T. Clarke, S. F. Robbins, H. S. Pierce.

There being no further business the Society adjourned until May 13th, 1907.

H. J. DAILY, Secretary.

Bullitt.—The Bullitt County Medical Society convened in Shepherdsville for its regular monthly meeting. Those present were:—S. W. Bates, S. H. Ridgway, and G. W. Kirk. S. H. Ridgway presented a case of multiple neuritis, which displayed many phases of interest and provoked a full discussion of the case among those present.

I am exceedingly sorry that I am not able to write more about the Bullitt County Medical Society and its members. Whether it is my fault or the members' I am at a loss to state. I notify each member and non-member each month several days in advance of the meeting, but have failed up to this time to get a full house.

G. W. KIRK, Secretary.

Ballard.—The Ballard County Medical Society met at Hinkleville March 12, 1907. Unfavorable weather accounted for the small attendance, though we added three new members to our list:—T. J. Marshall, Blandville; D. E. Burrow, Kevil R. F. D. No. 2, and J. E. Martin, Lancaster. The following members paid their dues:—J. D. Rollings, Hinkleville; J. W. Meshew, Barlow; W. A. Page, Barlow; H. R. Melton, Wickliffe; T. J. Marshall, Blandville; D. E. Burrow, Kevil R. F. D. No. 2, J. S. Davis, Lovelaceville. J. E. Martin has not paid his dues.

There were only three members present that were on the program.

J. D. Rollings talked on treatment of lobar pneumonia; local afflictions brought about much discussion as some of the members used cold application to the chest and some hot applications. Those that used hot applications did not know how to keep the family in good spirits while ice

cloths were being applied to the patients. The only unfavorable symptom in using cold applications is hoarseness which soon disappears.

W. F. Stevens made an excellent talk on Pernicious Malaria. After his talk on the subject, it was well discussed, and the essence of the whole thing was to get free action from the bowels and cinchonize thoroughly from 10 to 48 hours.

The doctors being in a hurry to take up a new business the Society adjourned.

H. V. USHER, Secretary.

Cumberland.—The Cumberland County Medical Society met in W. C. and L. O. Keen's office March 27, at 1 P. M., with the following members present:—W. C. Keen, L. O. Keen, H. L. Cartwright, W. F. Owsley, R. L. Richardson. Our President A. W. Sharp being absent, H. L. Cartwright filled the chair.

H. L. Cartwright reported a case of abortion which was very interesting, and was discussed by all present.

W. C. Keen read a paper on Diseases of the Rectum. In this paper he only took up the subjective symptoms; it was a very able paper, he emphasizing the importance of the subjective symptoms because it gave us a good idea what to look for when we made our examination. He is aiming to give us two or three more papers on this subject and will take up the objective symptoms in his next paper; we think this will be a treat to our Society, and will be worth the time of every physician in the county to come and hear them. A motion was made by W. C. Keen, that no member of our Society will make an examination for any life insurance company for less than five dollars, all of which must be paid by said company. This motion was carried and signed by every physician present. Since our meeting I have seen the rest of our members and they have agreed to said motion, and signed their names to same. We have ten paid-up members, and I have had to work hard to get this number. I have had a harder time to get the country physicians in line this year than I did last year. I believe I know the cause, I always notify each member and non-member of the place and time of our meeting, and for a long time the country physician was good to attend our Society, but after riding or driving from 7 to 10 miles to get to the appointed place, instead of finding the Burksville physicians ready and waiting for us, outside of Drs. Keen and Cartwright we have to run all over town and hunt them up and bring them to our Society. Sometimes we can get them in time to meet at 10 A. M., our appointed time, but most of the time we have to put off our meeting until 1 P. M., and a good many times we

cannot get them at all. This is the reason the country physician has quit coming to our meeting and it is also the cause of not sending up a monthly report; I do not wish to write an imaginary report.

I believe with the membership we now have in our Society, if we will go to work and mean business we can have one of the best county societies in the State, and instead of having so many non-members they will be sending in their card asking for membership.

ROBERT L. RICHARDSON, Secretary.

Clark.—The Clark County Medical Society met in regular monthly session Thursday, April 4th, in the grand jury room at Court House. The meeting was called to order by President Willis; minutes of last meeting were read and approved.

J. H. McKinley read an excellent paper on Diphtheria, which was thoroughly discussed and highly complimented, all the members present entering into the discussion with enthusiasm.

The discussions which followed the reading of Dr. McKinley's paper were of so much interest and the time allotted to the meeting was well nigh spent. The reading of Dr. Coombs' paper on Adenoids was postponed to the next meeting, with Dr. Venable added as essayist.

The meeting in May bids fair to be one of much interest, as business of importance will be taken up and there is the promise of two excellent papers.

ERNEST COLE, Secretary.

Caldwell-Lyon.—The Caldwell-Lyon Medical Society held a very interesting meeting in Princeton, April 9, 1907. We had papers by W. S. Stone on Puerperal Eclampsia and I. Z. Barber on La Grippe. Both papers were very good indeed and brought out an animated discussion by every member present and I believe more interest was manifested in the meeting to-day, than at any time since the birth of the society four years ago last month.

Those present to-day were C. H. Linn, A. D. Purdy, of Kuttawa; Frank Walker, of Farmersville; J. A. H. Miller, C. J. Pollard, Z. T. Cunningham, F. J. Sullivan, I. Z. Barber, Cynthia Cunningham, W. S. Stone and R. W. Ogilvie, of Princeton.

Cynthia Cunningham joined the society to-day and since our last meeting W. B. Moore, of Crider has paid his dues and renewed his allegiance; I have been unable so far to get either one of these last to sign the insurance agreement, but feel sure that they will do so after they have had a little more time to think the matter over.

The next meeting will be held in Kuttawa, the

third Tuesday in May.

R. W. OGILVIE, Secretary.

Carroll.—The Carroll County Medical Society met in regular quarterly session at the office of Drs. Gaines, Carrollton, April 9th. President Holmes being absent, Vice-President Wheeler did the honor gracefully.

F. M. Gaines reported a case of mesenteric occlusion; case was diagnosed as intestinal obstruction and concurred in by Drs. Holmes, Wheeler, and F. H. Gaines, who saw the patient. Patient was operated upon, but died a few hours later, no obstruction being found. Diagnosis of mesenteric occlusion was not made until after death, as it was a typical picture of obstruction. Credit was given to G. A. Henden's paper. This case was discussed freely by all present. The essayist for the occasion being absent, this part of the program was taken up by informal discussions of "things in general."

The following officers were elected:—J. P. Wheeler, President; J. R. Darbro, Vice-President; F. M. Gaines, Secretary-Treasurer; F. H. Gaines, and W. S. Golden, Censors. The following were added to the membership:—W. S. Golden, G. L. Sarlles, and R. N. Williams. It was decided to have an all-day meeting and a barbecue at the July meeting.

F. M. GAINES, Secretary.

Calloway.—The Calloway County Medical Society was called to order at 2 P. M. by the President, and after the committees had reported and the minutes of the last meeting were disposed of, a short time was spent in discussing the best plans and way in which to spend the one hundred dollars allowed the County Board of Health by the Fiscal Court, to institute an educational campaign against tuberculosis in this county.

Some of the doctors present agreed to help by delivering some lectures to the school children in his district.

It was agreed to hold our next special meeting with the ministers of the town and county. The following committee was appointed to arrange program and dates:—J. G. Hart, W. H. Mason, and C. N. Crawford.

The program was then taken up; each man to quiz thirty minutes on the subject given:

C. O. Gingles—Use and Abuse of Forceps.

A. N. McRee—Version.

Wm. M. Mason—Immediate Detection and Repair of Lacerations.

The doctors were well loaded and plied questions so hard and fast that the President had to call them off.

It was a fine meeting and everybody present was pleased. W. H. GRAVES, Secretary.

Daviess.—The Daviess County Medical Society met in regular quarterly session, at the city hall in Owensboro on April 19, 1907. The President, A. McKenney presided and forty-four physicians were present. After reading the minutes of the last meeting the application of Joseph H. Aud, A. W. Carpenter, Wm. S. Little and J. L. Carter were read and referred to the Committee of Censors.

S. J. Harris read quite an interesting and lengthy paper on Epidemic Cerebro-Spinal Meningitis. He said it was an acute infectious disease, appearing in localities and transmitted by means of the meningococcus in a manner very much similar to that in which diphtheria is transmitted. Scotland is now suffering from the worst epidemic she has ever experienced. The mortality of the disease is very great. There is no specific treatment. He gives some form of opium, preferably morphia hypodermically to relieve pain, also chloral hydrate and ergot. In discussing the paper L. G. Armendt said the first and most prominent symptom was stiff neck. The symptoms were very sudden in some cases, sometimes death followed in three hours. No treatment seemed to do any good. Most of his cases had died. One is still living, but is melancholic. He gave morphine to relieve suffering, applied cold to the head, also gave ergot and the bromides.

C. J. Lockhart said he did not believe morphine was good treatment. Chloral and bromide, hypodermics of ergotole was the best treatment.

C. H. Ladd said the less medicine you give the better for the patient. It is an endemic disease, but not continuous. Prevails mostly in cold weather. When spinal symptoms prevailed it was less fatal than when cerebral symptoms were more prominent.

J. A. Woolfork said he had seen a great many cases, all died but one, he did not give morphine if it could be avoided, but used chloral bromides and ergotole. Blisters and hot applications do no good.

E. B. McCormick said he failed to see where we get any good results from morphine in this or any infectious disease. It binds up the secretions. Elimination from beginning to end is the objective point, see that the skin, kidneys, bowels and all other means of elimination are in good order; opium locks up all except the skin. Iodide of potash is a good remedy He would first give calomel in 5 or 10 grain dose.

J. P. Heavrin said he had witnessed an epidemic in 1884. It was very fatal, the majority died. He gave calomel first, then opium and chloral. He thought opium was especially indicated to relieve pain. There is no specific treatment.

S. Lambert said that very little had been discovered as to the cause of the disease. An epi-

demic in one of the back counties was attributed to malaria by the local physicians. He had never seen a case recover, but he had given all the remedies, consequently he had no faith in medicine to cure the disease.

D. M. Griffith said he was very much indebted to Dr. Harris for his splendid paper. The infection enters the system through the nose and throat. No doctor is excusable who does not take all precautions to keep from carrying it to others. If we would treat this disease successfully, we must have a serum derived from the meningococcus. Mavor injects air into the rectum. He thinks the oxygen is what did good, and he has better success than anyone else. As this disease is most dangerous in cold weather, experimental work might be carried on in the way of injecting hot air into the spinal column.

W. F. Stirman said this disease was often confused with hysteria in the beginning, for hysteria comes on in so many different forms. Epidemic is a misleading term. Terms were coined before the use of the microscope. He considered all such diseases contagious. Just why one man contracted them and another did not he could not tell. The germs being enclosed in a small cavity are not readily diffused, but are less contagious. He told the symptoms, maintained the patient and condemned the abundant use of morphine, and only used it when the patient suffered. He used chloral to an advantage, but never saw but two cases recover.

J. W. Barnhill said all his patients died except one. His throat was paralyzed so that he could not swallow medicine and he thought that was what saved him.

J. W. Ellis said there was no specific treatment, but much could be done in the way of palliatives.

He gave opium to relieve pain and to cause rest. Opium is a necessity in these cases. He used iodide of potash and bichloride of mercury.

If the diplococci were always present a serum made from this germ alone can cure the disease.

A. L. Coke read a paper on chronic malaria, and H. K. Orsburn on Apoplexy.

The society will meet on June 18, 1907, at Philpot as the guests of the physicians of that locality.

J. J. RODMAN, Secretary.

Fayette.—The Fayette County Medical Society held its regular monthly meeting April 9 at 8 P. M. in the Public Library. The committee appointed upon securing a stenographer to take down discussions of papers reported that the society could not afford to pay the price, so the secretary was requested to take the discussions as best he could.

The very large sale of "Coca-Cola" was discussed and the secretary instructed to secure a

formula and present it at the next meeting.

B. F. Van Meter and F. P. Perkins presented clinical cases.

J. J. Gibson read a very interesting paper on "Obstetrics in the Country" (which I am sending you for publication in the Journal).

Discussed by Drs. Holloway, Coyle, R. M. Coleman, Bullock, Beard, Kinnaird, Clarke, Van Meter, and Gibson.

C. A. Vance read a paper on "Surgical Asepsis," discussed by Drs. Marks, Stucky, Scott, Holloway, Van Meter and Vance. Attendance, 32.
R. JULIAN ESTILL, Secretary.

Green.—The Green County Medical Society met in the office of B. M. Taylor at 10 o'clock, Thursday morning, March 7th. The following members were present:—E. L. Thompson, President; O. H. Shively, J. M. Williams, E. L. Strader, B. M. Taylor, secretary. R. C. McChord, of Lebanon, was present as a visitor.

The forenoon was taken up in the presentation of cases. R. C. McChord exhibited a specimen of Goiter removed from a brakeman. The Goiter was large enough to interfere with breathing. The removal was followed by complete recovery and relief from symptoms.

Dr. Williams reported a very interesting case of appendicitis.

B. M. Taylor reported a case of removal of the Lingual Tonsil in a boy aged 18 for the relief of chronic Laryngitis. The patient was relieved of the trouble in about three weeks after the operation.

R. C. McChord read a paper on "The Necessity of immediate repairs of Injuries to the Perineum." The paper was a very practical one. The essayist spoke of the results of neglected injuries and said that it was the duty of the physician to repair the injuries and restore the soft parts as near to normal as possible.

The paper was discussed by all present.

Dr. Strader said that he repaired all injuries deep enough to involve muscular tissue.

B. M. Taylor said that no physician was entitled to collect a fee if he left a torn perineum without making an effort to repair it.

The society was disappointed in not having the state secretary with it, but enjoyed the paper on Post Partum Hemorrhage which he had prepared to read. This was read by the county secretary.

The paper was discussed by all present. The excellent paper was appreciated by the society, but it expects to be favored with that visit from the state secretary at some future date not far distant.

The society was delightfully entertained at a "Mulum in Magno" course dinner by Dr. and Mrs. O. H. Shively. As the place at the table

for the State Secretary was vacant Dr. McChord acted as proxy and ate two dinners.

This social side of the meetings causes doctors, who have heretofore been strangers, to touch elbows and forget their little petty jealousies and to feel and know that they are not competitors, but brothers in a profession which has for its object the upbuilding of mankind morally and physically.

B. M. TAYLOR, Secretary.

Henderson.—The Henderson County Medical Association met in the office of Drs. Duncan, & Moseley, April 8, 1907, with Dixon, Bethel, Forwood, Bethel, Quinn, Hancock, Poole, Graham, Moseley and Griffin, present. After call to order by President Forwood and the usual minutes, clinical cases were called for.

Dr. Moseley reported case of headache in a 9-year-old child with irregular heart's action, the cause of which he was unable to determine.

Dr. Dixon reported a case, seen in consultation, of a woman—age 73, weight 200, who had fallen on her hip. The diagnosis was an impacted fracture. The non-use of splints was advised with sand-bags instead, and no manipulation, for in these cases bony union is uncommon and difficult and the impaction should not be disturbed.

Dr. Butler reported case of Pott's disease with apparent cure, which was freely discussed.

On motion the regular program was deferred and Dr. Quinn was asked and responded with a paper on "Pelvic Abscess, with Vaginal Incision and Drainage," in which he said pelvic abscess from streptococcus infection following a confinement or abortion, characterized by a rapid onset, accompanied by a chill, high fever, fast pulse, sweats, rigors, and signs of a general depression from septic absorption soon shown, causing a desperate illness with a marked tendency to general peritonitis or septicaemia to such an extent that as to the method of operation there is no choice left us, except to leave the patient to her fate, there is only a Hobson's choice left, make the vaginal incision and drain the abscess, even though a subsequent abdominal operation is necessary to complete the cure or relieve the patient.

While gynecologists, who are now doing the best work avoid vaginal operations, when the supra-pubic can be done, still in cases as spoken of the records of these cases show such unexpected and gratifying results that, though being in accord with the modern teaching, still advises the vaginal incision in recent acute cases as described in the paper. After thorough drainage, irrigation, packing loosely with iodoform gauze and daily dressing, the patients usually do well.

DISCUSSION.

Dr. Dixon: The vaginal operation in pelvic abscess is no doubt a life saver in very many cases, but where the vaginal fluctuation is not apparent, or the position of the abscess cannot be easily determined, then an abdominal section is performed by most recent surgeons. The dangers of the vaginal operation, fecal fistula from intestinal injury, injury to the uterine artery or to the ureters, are not to be lightly considered.

Drainage is the important point, and if better drainage can be had per vagina, then drain in this way. Except in those cases in which the life of the patient depends on an immediate operation would do a high operation.

Dr. Bethel: I question the propriety of irrigation as a routine practice in these cases. This is not being done by some surgeons at the present time. Many of these cases get well without the intervention of surgery, nature solves the problem.

Dr. Moseley: Unable to get vaginal fluctuation, I prefer opening the abscess through the abdomen.

After a few remarks by Dr. Quinn in closing the discussion, and the reading of a communication from Secretary McCormack relative to the work, the society adjourned.

SILAS GRIFFIN, Secretary.

Hart.—The Hart County Medical Association met in Munfordsville, March 26, 1907. Dr. Bryant reported a case of puerperal eclampsia in a primipara, normal labor lasting six hours, the convulsion came on in about an hour after confinement and lasted twenty minutes. He gave Veratrine Veride; the case terminated favorably.

T. H. Garvin read a paper on Concussion of the Brain, and reported a case. In discussing the paper Dr. Gaddie said it was an interesting case and well reported. Dr. Adams thought the paper was an excellent description of the case and the subject was well handled by the speaker. Dr. Bruner commented on the interesting subject and excellent report of the case and could add nothing to the subject.

Many interesting cases were reported by the doctors present.

Hart County is greatly in earnest about her organization and is a unit on the insurance question, she has reported more members than any time past.

The resolutions on the death of Dr. Walton are published in this issue of the Journal.

H. C. BRUNER, Secretary.

Hickman.—The 20th regular meeting of the Hickman County Medical Society, met with R.

S. Killough at Springfield April 4th. In absence of the president, the secretary called the house to order at 11 o'clock A. M. W. W. Richmond was elected temporary chairman, and occupied the chair only long enough for the society to elect a vice-president, as that office was rendered vacant by E. L. Kennedy having moved to Arkansas. W. F. Peebles was elected vice-president, and at once took the chair. Society next proceeded to regular order of business. Minutes of last meeting being read and approved, W. W. Richmond made a motion, which carried, that at our next regular meeting, (which is July 4th,) we invite the clergy, lawyers, dentists and as many of the laity to meet with us as care to and that we ask one or two members of the above to write a paper to be read at this meeting. This motion carried and it seemed to be the opinion of all present that such a meeting would redound to the good of all. The chair appointed a committee of two to assist the secretary in arranging a program for the July meeting.

W. R. Moss offered a resolution as follows:

Resolved, That the Hickman County Medical Society, now assembled, heartily endorse the action of the State Society held in Owensboro in 1906, in regard to examination for old line life insurance companies that we as a body agree to keep said obligation. Further we endorse the course pursued by the State Journal in regard to advertising or prescribing proprietary preparations not approved by our national Council on Pharmacy and Chemistry. This resolution was adopted unanimously.

Upon motion the president appointed a committee to confer with committees from Carlisle and Ballard County Medical Societies in regard to holding a meeting between the three counties some time in the near future.

This concluding the business session, society adjourned to take up regular program at 1:30 P. M.

1:30 p. m. house called to order by vice president, Dr. Peebles.

Dr. W. W. Richmond read a paper on the "Ideal Relation Between the Doctor and the People." The doctor's paper was pronounced a very excellent one and covered the ground so thoroughly that 'twould hardly admit of discussion, however we all felt after having heard it that we could go ahead with our good work with renewed energy, helping where we could a brother in the profession as well as in the laity.

R. S. Killoughs paper on "Diabetes, its Complications, and Report of a Case," was very interesting from the fact that there were no technical phrases or statistics quoted but only a clear cut route outlined by the doctor as to etiology, symptomatology, care and treatment

Dr. Killough lay especial stress on the importance of diet in such cases and gave it as his experience that morphine gave better results than codeine therapy. The paper elicited a very lively discussion, entered into by all present.

Dr. W. A. Craig read a paper on "Croup," in which he classified the various forms giving it as his opinion that all forms of croup other than the ordinary spasmodic croup, were diphtheritic in reality or that the Kloebs-Loefer bacilli were present in every case. This paper was pronounced a very excellent one; and also brought about a very interesting discussion some agreeing and some differing with the doctor's belief that all cases of true croup were diphtheritic in origin.

This concluding the program the house adjourned to meet the first Thursday in July at Clinton. Members present at this meeting were as follows: W. W. Richmond, J. R. Scarborough, W. R. Moss, J. A. Farabaugh, G. F. Beeler, J. M. Beeler, Thos. Wayne, W. A. Craig, R. S. Killough, W. F. Peebles, Chas. Hunt, W. F. Berry, W. H. Winter, E. B. McMorries. Visiting physicians present were, G. M. Peck and Drs Jackson, of Arlington, and Crauch and Mosby, of Bardwell.

E. B. M'MORRIES, Secretary.

Hart—The report of the Committee on Resolutions in respect to the memory of Claiborne J. Walton:

Claiborne J. Walton died at his residence in Munfordville, on the first of February last in the eighty-fourth year of his age.

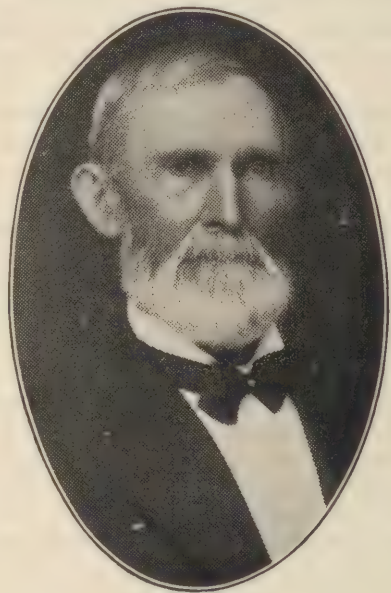
Dr. Walton was born in Barren county, Kentucky, and was descended from a highly respectful and prominent family who bestowed much care upon his early training. Attending the common school of his county during his minority, he completed his studies at a Collegiate Institute at Glasgow. Having finished his collegiate course at this point he now selected medicine as his profession, and giving a due preliminary study to this, afterwards graduated from the Medical Department of the University of Louisville in March, 1853. Locating after this in Hart county, for the practice of his profession he soon by his popularity and success placed himself among the more prominent and leading physicians of his county, a large and lucrative practice in Hart and adjoining counties, from which he was enabled to leave a handsome and valuable estate at his death.

It may be said of him that no one took a deeper interest in his profession than he, or did more to uphold it and advance its progress. He assisted as a charter member in organizing the Kentucky State Medical Society at Frankfort, in the year 1847; and was prominent in the organization of the Hart County Medical Society

in October, 1872, of which he was always a most esteemed and active member and for much of the time since its organization, president.

Added to his practice in a more general way he devoted much of his attention and study to surgery, and he soon became quite noted as a surgeon and did a large practice as such. Our civil war coming on he enlisted in September, 1861 on the Federal side, and was immediately thereafter commissioned surgeon of the Twenty-First Kentucky Regiment of Volunteer Infantry. This regiment participated with gallantry in the following engagements, viz: Perryville, Stone River, Chickamauga, Atlanta, Jonesboro, Franklin and Nashville.

After the war closed he returned home and resumed the practice of his profession, becoming



DR. C. J. WALTON.

in a short time, the leading consulting physician of his county, a position he held up to the time of his death.

After locating in Hart county, Dr. Walton attracted by the beauty and lovely character of Miss Nannie E. Maxey, the daughter of a highly respected and well-to-do farmer of the county, sought and obtained her hand and was married to her on December 23, 1857. By this union five children were born, of whom only three survive: Mrs. C. A. Epes, of Blackstone, Va.; Mr. Maxey Walton and Miss Nora E. Walton, of Munfordville, Ky. Their oldest daughter married the Hon. S. M. Payton, of Elizabethtown. She died several years ago and is survived by two children, Mrs. Eugenia Payton Mentz and Walter S. Payton, who is now attending the lectures of the Medical Department of the Univers-

ity of Louisville. His wife died some fourteen years ago much esteemed and loved by all who knew her.

A highly marked, if it may not be rather called innate characteristic of Dr. Walton was the deep interest he took in politics. Outside of medicine, in fact, nothing engaged his study and attention more than this. Whilst for a number of years he took a more or less active part in political affairs including National, State and County politics generally. With this penchant for politics he was induced by friends to take the political field as a candidate for office which, he did a number of times. He was the first member of the General Assembly of Kentucky under the Constitution of '49-'50 and was a member of the State Senate when the Civil War broke out. He resigned his seat in the Senate to enter the army, and was again elected to the Senate in 1873, 1881, and 1895. He was again elected to the Lower House in 1899.

He was appointed United States Pension Agent at Louisville by President Harrison in 1890. He succeeded Gen. Don Carlos Buell in 1890. He succeeded Gen. Don Carlos Buell and served the full term of four years, and disbursed millions of money to the satisfaction of both the Government and the people.

But whilst thus leading a strenuous life, professional and political, Dr. Walton did not forget or neglect his more important and higher spiritual interests. He had, for the very many years of his life, been an earnest follower of the "Lowly Nazarene," having united with the Methodist church half a century ago, and ever since been a strict and consistent member of that ecclesiastical body. He was always punctual in attending its meetings, and active in all the different departments of its work. He died as he had lived a true Christian, and with the full assurance of a blissful immortality beyond this life.

Having given a brief sketch of the more prominent events in Dr. Walton's life history, the following resolutions, in regard to his death, are presented for your consideration:

First. That in the death of Dr. Walton, this society has lost one of its most highly esteemed, learned and useful members, one ever prompt at its meetings; courteous and instructive in its deliberations, and one ever using his best exertions for its success and perpetuation.

Second. That as a citizen, none was ever of higher standing in his community, or whose death was more regretted by friends and acquaintances.

Third. That we extend to the surviving members of his household our deepest sympathies over the loss to them of a kind and loving father whose higher care for them was ever a coveted task and welcome duty.

P. C. SUTPHIN, Chairman,

T. H. GARVIN,
H. C. BRUNER,
J. J. ADAMS.

Harrison.—The regular quarterly meeting of the Harrison County Medical Society was held at the Harrison County Hospital on the evening of April 1st. Most members of the society were present. Some very interesting cases were presented and reported. Dr. Martin read a paper on The Diagnosis and Treatment of Incipient Tuberculosis. Paper was very thoroughly discussed. We are doing well with our Post Graduate Course and meet every two weeks. All the eligible physicians of our county that are in active practice are members and I am certain that nothing has helped us so much or brought the profession together more than has this Post Graduate work. I think it well for all county societies in the state to take up this work. After the meeting adjourned the society was entertained at lunch by Drs. Gillispie and Stewart.

J. W. REES, Secretary.

Harlan.—The Harlan County Medical Society met at its regular meeting April 8th, 1907, at the Howard House, Harlan, Ky., at 8 A. M. The present epidemic of pneumonia and cerebro-spinal meningitis, which we have had in our town and county, and is still existing to some extent, was taken up and discussed as to the prophylaxis and treatment of same. Also the sanitary condition of our town was taken up and discussed as to the best means of drainage and disinfecting as a prophylaxis against the present epidemic of Cerebro-spinal meningitis which has been so fatal in our town and county, and as a protection against all infectious diseases.

Some several days ago we saw a telegram from the president and a letter from the secretary of State Board of Health stating that they had ordered a physician to come to Harlan and assist us in the present epidemic of Cerebro-spinal meningitis, which we have in our county, and we have been looking for him to come, but have not seen or heard from him yet. We should have been very glad to have had the aid of some experienced one, and such we know the State Board would have sent us, should anyone have come. We suppose no one will come now, as the epidemic is subsiding some at the present time, and if no further outbreak, will soon be over. We have had ten deaths from meningitis up to the present time. No further business being before the society, it is ordered adjourned until next regular meeting night.

All physicians who are qualified to practice medicine in Harlan County belong to our society and have all paid their dues.

G. P. BAILEY, Secretary.

Henderson—The Henderson County Medical Association met in the hospitable home of J. H. Letcher, February 25, 1907, at 8 p. m. Members present were J. H. Letcher, Ligon, Moss, Moseley, Forwood, Graham, Poole and Griffin. The society was called to order by President Forwood. The minutes of the preceding meeting were read, corrected and approved.

The applications of O. G. Jones and W. V. Neil were reported favorably by the Board of Censors and the secretary was instructed to cast the ballot whereupon they were declared elected to membership.

Dr. Poole reported an epidemic of abortions in Audubon produced by LaGrippe.

J. H. Letcher read a paper on Multiple Neuritis.

Dr. Poole gave way to Dr. Graham who read a paper on "Anatomy of the Female Pelvis."

After adjournment an elegant lunch was served and a pleasant half hour was spent by all those fortunate enough to be present.

SILAS GRIFFIN,

J. C. MOSELEY,

Secretaries.

Henderson—The Henderson County Medical Society met with Dr. C. H. Johnson, March 25, 1907. Members present were Drs. Dunn, Moseley, E. N. Powell, Bethel, Dixon, Hancock, Ligon, Forwood, Wilson, Poole, Neel, Graham and Griffin. Visitor, Dr. Harges. Minutes of previous meeting read and approved.

Dr. Dixon reported a case of heart lesion.

Dr. Hancock reported case of cretinism, also spoke of early use of forceps, which last subject was discussed by Drs. Dixon and Bethel.

Dr. Griffin reported case gonorrhea with fistular tract just below meatus.

Papers—Dr. Ligon, "Tetanus." Saying in part it is a specific infectious disease caused by B. Tetanus, which gains entrance to the body through an open wound.

After giving the cardinal symptoms, he urged specific attention should be given all open wounds by disinfecting cauterizing, and rational after-care. Prevention much easier than cures.

Discussion.—Dr. Dunn, has only seen two cases in his practice.

Dr. Dixon, complimentary. Had ten cases. One recovered under anti-toxin. Case boy 14 years of age.

No question of et. due to toxins formed by Bac. T. Emphasized care of wounds particularly those caused by toy pistols and insists on thorough opening and cleaning and cauterizing of all wounds.

Dr. Bethel saw case in lady. Origin was a nail in foot. Developed four weeks after injury, lived three days.

Case 1906. Origin toy pistol wound in palm of the hand. Developed in morning after. Gave three doses of anti-toxin in thirty-six hours. Lived three days.

Would now give anti-toxin at once.

Had one case to recover. Wound was in testicle.

Dr. Hancock.—Treatment. Remove source of infection, counteract poison in the system. Nutrition.

Dr. Moseley. B. Tetanus found in gun shot or punctured wound. Suggested the treatment as recommended by Dr. Murphy, the withdrawal of Sp. fluid and the injection of Sluck's solution.

Henderson—The Henderson County Medical Society met with Dr. Hancock March 3, 1907. The following members were present. Drs. Dixon, Forwood, Stone, Letcher, Quinn, Hancock, Bethel, Graham, Moseley and Griffin.

President Forwood presided. The minutes of the previous meeting were read and approved and clinical cases were reported.

Dr. Stone reported a case of typhoid fever with sub-normal temperature for ten days.

Dr. Griffin reported a case of typhoid fever beginning like La Grippe.

Dr. Forwood reported a case in which mother had typhoid fever with nursing babe who developed fever which has persisted for eight days.

Dr. Dixon reported a case of suppuration of both ears with high fever, 104-105, following cessation of discharge from the ear.

Dr. Forwood reported a case of erysipelas of the head, face and ear in a man. The wife was confined a short time later in the same room Puerperal fever developed forty-eight hours later, the patient lived six days.

Dr. Hancock read a paper on "Apoplexy."

The society adjourned.

SILAS GRIFFIN, Secretary.

Logan—The Logan County Medical Society held its regular meeting at the Court House in Russellville, April 4th, with quite a good attendance.

After the usual preliminaries, Walter Bryne presented a very interesting clinical case in the person of a young adult negro, who had suffered from frost-bitten toes, which was followed by natural amputation. When first seen by the doctor all the toes were almost completely sloughed off, having been frozen about two weeks previously and nothing was necessary to complete the operation, but to slip off several bones, which was done with forceps, the patient experiencing no pain. No dressing was ever used except gauze saturated in a solution of carbolic acid in castor oil. No tonics were ever necessary, the patient never seeming to suffer any systematic

depression, very little soreness and almost no inconvenience. The result was a perfect recovery with well rounded good skin-covered stumps.

D. G. Simmons reported a case of extreme ly irritable ulcer situated anterior part of leg over tibia, so tender that no dressing could be applied without the patient experiencing extreme pain for some time afterwards. Dr. Simmons was using successfully a powder composed of morphia and boric acid as a dusting powder.

Dr. Alderson advised the use of carbolic acid as a caustic to be followed by the dusting powder dressing.

Dr. Piper favored the carbolic acid and the supporting of the blood vessels by drawing the edges of the ulcer as near together as possible by the use of adhesive plaster strips. Also the rubber bandage from foot up and as a last resort to the use of the curette.

Dr. Burr reported a case of Apoplexy, the treatment of which was discussed by several members.

J. R. Crittenden reported an interesting case of Hermanesthesia, the cause of which seemed to be still obscure.

D. G. Simmons read an interesting paper on and reported a case of Acute Nephritis with its treatment.

A. R. Kempf read a report of a Primipara at age of 49, giving an interesting history of the case from about the fourth month of pregnancy.

F. W. Lee opened the discussion on La Grippe. He favored the use of salicylates, and, the careful use of some of the coaltar preparations in selected cases.

Dr. Simmons had noticed a great deal of hemiparesis and a periodic tendency in this epidemic. He had had more than usual success with quinine and preferred Belladonna and calomel for the nerve symptoms.

W. W. Lasley preferred to always use a purge, unless the bowels are acting freely and then only treat symptoms.

Dr. Piper favored the use of Aspirin and Salol in most cases and if necessary Codeine for the general pain. Always uses a purgative, preferably calomel, followed by a saline.

J. R. Crittenden has noticed the marked periodic tendency and has had many cases of abscess in head complicating Grippe. He preferred paregoric as an anodyne and calomel as a purge.

The meeting was marked by free discussion. Next meeting will be in Russellville, on Monday, May 6th.

J. K. W. PIPER, Secretary.

McCracken—Our County Society closes a year of good work. The society has recently adopted the plan of meeting every week, each Tuesday evening, and post-graduate work is being done, which is resulting in much good. Each branch

of medicine is being covered by some member of the society and all the members who attend are being stimulated and improved.

Some facts from the retiring secretary's annual report. The society held twenty-three meetings during the year with an average attendance of fourteen. The President and Secretary attended every meeting. The society received seven members during the year and lost six; one by death, three moved away and two failed to pay dues. The present membership is forty-four, the largest membership in the history of the society. Young, active, and enthusiastic members have been elected officers for next year and everything will run smoothly.

J. T. REDDICK, Secretary.

Monroe—The Monroe County Medical Society met at the office of Drs. Bushong and Duncan, Tompkinsville, Ky., Thursday, April 4th, 1907. O. P. Hamilton, in the chair; Drs. Bedford, Bristow, Bushong, Geo. W., and Bushong, P. W., Duncan, England, Hamilton Palmore, Smith and Sympton present. Dr. P. W. Bushong and wife, of Summer Shade, Metcalfe county, present as visitors. Dr. Hamilton set the hoop rolling by citing a case, child with pneumonia, thirteenth day, pulse 165, respiration 65, temperature 104. Two physicians in charge; third called in consultation. Physicians in charge had given up all hope of saving the child and asked the third man what, if anything could be done for the child. Consultant asked if certain remedies had been or were being given which was answered in the negative. The consultant suggested that these remedies be given a trial. Physicians in charge asked consultant if he had given them a trial in a similar case at this stage, which was answered in the negative. He was then asked why he would give the remedies suggested and was told because they offered the only possible chance of saving the child. He was then asked what therapeutic effect he would obtain, and answered: I do not know, but do know that it is the only hope we have of saving the child. Physicians then agreed to leave it to the family. The family decided to try the consultant's remedies, which consisted principally in wrapping chest of the child in a poultice material. Child perspired freely that night and was much better in the morning and went on to complete recovery. Question raised by Dr. Hamilton, "Was this procedure ethical?" Discussed by Drs. Bedford, Bushong, Bristow, Duncan, Smith and Sympton, all agreeing that the procedure was justified and that the consultant was right in his position.

The society being guests of Dr. Geo. W. Bushong were told that dinner was ready and all repaired to the Tompkinsville hotel, where a feast was spread, which was highly enjoyed by all.

After dinner Mrs. S., was presented by Dr. Palmore as clinic, "Mrs. S., white, aet. 44, m., three children, oldest twenty-four, youngest five. Has been having trouble with back and bowels since last confinement. Has small tumor in or on Poupart's ligament, on right side, about middle-way between anterior superior spine of ilium and pubic attachment. Tumor very tender and enlarged at menstrual periods. Periods regular but painful, patient having to keep her bed for two or three days. Ovaries tender. Right more so than left, well nourished but claims she is bloated and that feet and hands are swollen most every morning. Some mornings so she can hardly close the fingers. Bowels habitually constipated. Kidney action normal. Urinalysis revealed nothing abnormal.

Patient given "Uterol, Nux Vomica and Cascara Sagrada" labeled "Blood Tonic" as she had announced that she believed she needed a blood tonic.

President then called for reading of papers, which was responded to by Dr. Smith's reading his paper, "Cerebral Congestion."

Discussion—Dr. Duncan: I want to thank the Doctor for presenting us with such an able paper so well written that he has left nothing to add nor any room for criticism. If I should suggest anything in addition to what the Doctor has already said I would suggest that in the treatment of passive congestion with bromides and stimulants that bromide of ammonium be tried as it is both sedative and stimulant.

Dr. Hamilton:—Having had several cases of Cerebral Congestion recently and having been associated with Dr. Smith as I have, I can heartily commend the treatment laid down by him, yet I sometimes prefer the saline to a calomel purge. I commend the paper and its author to the society.

Dr. Smith, closing: I am very grateful to the society for the pleasant reception of my paper. As to the bromide of Ammonium I feared to incorporate it and scarcely ever resort to its use from the fact that there is already or will be shortly a very great amount of carbondioxide in the blood and ammonium bromide has a tendency to increase that amount, which we want to avert if possible.

Dr. and Mrs. P. W. Bushong invited the society to attend a medical meeting at Summer Shade, Metcalfe county, in June. A special invitation was extended the Doctors' wives.

The Committee on Program reported for May meeting: "Arsenic," Dr. Marrs; "Shingles," Dr. Duncan. Adjourned to meet at Tompkinsville the first Thursday in May, 1907.

E. E. PALMORE, Secretary.

Muldraugh Hill.—The Muldraugh Hill Medical Society convened in the City Hall at Elizabeth-

town, Thursday, April 11th, and was called to order by President David W. Gaddie, of Hodgenville, at 10:30 o'clock. About fifty members were in attendance.

Minutes of the December meeting were read and adopted.

F. P. Strickler reported a very interesting case of Retention of Urine in a man aged seventy years.

Interesting discussions by Drs. Dugan, Bowen, McChord, Green, Aud, Zimmerman and by Dr. Strickler in closing.

C. T. Riggs reported a case of Hodgkins' Disease of four years standing.

W. H. Strother of Big Springs read a paper entitled "Miscarriage and Its Treatment." (To be published in the Journal.) Discussions by R. C. McCord, C. Z. Aud, A. D. Wilmoth, D. C. Bowen, W. A. Ligon, J. T. Green, J. R. Ashlock, C. T. Riggs, S. W. Bates and by Dr. Strother, in closing.

Adjourn for dinner.

Afternoon session called to order by the president at 1 o'clock. W. Lucien Heizer, of New Haven, read a paper on, "The County Medical Society in Relation to Public Hygiene."

Discussions by D. C. Bowen, W. A. Ligon, B. F. Zimmerman, J. W. O'Connor, C. Z. Aud, D. W. Gaddie, A. D. Wilmoth, and by Dr. Heizer, in closing.

J. M. English, of Elizabethtown, read a paper entitled "How Shall a Doctor Spend His Money."

Discussions by R. C. McChord, J. W. O'Connor, D. W. Gaddie, and by Dr. English, in closing.

The president appointed D. C. Bowen, J. W. O'Connor and H. R. Nusz, a committee to draft resolutions of respect to C. J. Walton, deceased. A copy to be mailed to Dr. Walton's family and to be published in our State Journal as follows:

RESOLUTIONS.

Whereas, It has pleased Almighty God to remove from earth, Dr. C. J. Walton, of Munfordsville, Ky., one of our charter members; and Whereas, Dr. Walton was in person, character, professional attainments and social qualities such as to entitle him to our highest regard. Now be it

Resolved, That the members of the Muldraugh Hill Medical Society in convention assembled, take this means to proclaim his many virtues and superior qualities both material and spiritual. We mourn our loss and will strive to emulate his virtues. May he rest in peace and continue to be an influence guiding us to deeds of professional valor and a correct life.

Resolved, That a copy of these resolutions be

published in the State Journal and a copy sent to Dr. Walton's family.

D. C. BOWEN,
J. W. O'CONNOR,
H. R. NUSZ,

Committee.

Beginning with the August meeting, the annual dues of this Society will be \$1.00 instead of fifty cents.

Election of officers will be held during the August meeting when a Secretary will be elected to serve permanently.

Adjourned.

H. R. NUSZ, Secretary.

Russell—The regular meeting of the Russell County Medical Society was held at the office of W. G. D. Flannagon, April 8th. There was a good attendance but heavy rains prevented some of the doctors from the country from attending. It was one of the best meetings we have had for years as every one seemed very much interested and took an active part in the discussion, even Dr. Hopper was on the floor taking an active part in the lively discussions. It is a rare thing to see or hear him. All present were pleased and interested in his discussion, although he has been an active member of the society since 1889, and in the practice for nearly fifty years, he is always present at the meetings.

L. D. Hammond and Rowe read a good essay on "Menopause Vomiting in Pregnancy." The essays were excellent, and were discussed by Flannagon, Hopper, Scholl, Hammond and Rowe.

I, being the first secretary, gave the following history of the society. It was organized in 1888, under the title of the "Russell County Medical Association." In 1892 it united with Casey and Pulaski county under the title of "Tri-County Medical Society." In 1894 recognized and united with Adair, Casey, Clinton, Pulaski, Lincoln, Taylor and Marion under the title of the "Russell Springs District Medical Society." In 1904 it was hyphenated with Adair county by J. G. Carpenter, councilor, and titled "Adair-Russell Medical Society." In 1906 it was reorganized by J. G. Wesley and titled "The Russell County Medical Society." So it is at present known as the Russell County Medical Society.

So it will be seen that Russell County Medical Society has had many aliases, or names, it has gone through all these changes and has stood the storms surprisingly well with the able assistance of the associated counties. Loud cheers went up when I announced that the Russell County Medical Society was about twenty years old, however when I announced that there were only two present (Dr. Hopper and I,) who were present when the society was organized, as most of the charter members were gone to the great

beyond, there came sadness over the society. Now I take the pleasure by request of some of our members to give the names of some of the societies' presidents since its organization, to-wit: Thos. Gorin, W. D. Walford, M. D. Hopper, J. G. Carpenter, U. L. Taylor, W. Blair, J. G. Wesley, I. S. Wesley, S. G. Cain, J. I. Rowe, A. W. Cain, W. R. Grissom, L. F. Hammond, J. B. Scholl, B. R. Carpenter and J. F. Baker.

The next meeting will be the first Thursday in August.

J. B. SCHOLL, President.

Mercer.—The Mercer County Medical Society met Tuesday, April 9, at 2 P. M., in Harrodsburg. The essayist of the day was C. W. Sweeney, of Bohon, who read a very full paper on "Bronchial Asthma." During the business session plans were set on foot looking toward the erection of a public hospital in Harrodsburg. A number of prominent citizens were present as visitors, and they promised their hearty support in the movement. A campaign will be inaugurated in the county to arouse the laity to a sense of the need for such an institution and to enlist the support of the whole county. The county society invites the advice and plans of any who have had practical experience in such a movement.

C. B. VAN ARSDALL, Secretary.

Marshall.—The Marshall County Medical Society met in Benton in the office of Stilley & Jones to-day with the following members present: T. C. Coleman, V. A. Stilley, Jno. A. Jones, L. E. Jones, C. E. Howard, E. G. Thomas, and A. J. Bean. The minutes of last meeting were read and approved. The rules were suspended and the officers of last year were all re-elected, after which the society proceeded with the regular programme, which was as follows:—V. A. Stilley, Abortion; Robt. Overby, Malarial Fever; F. C. Cobfield, Pneumonia; E. G. Thomas, La Grippe. V. A. Stilley's paper on Abortion was read, giving special points on when and how, to tampon; also points on prophylaxis and general treatment with report of an interesting case of abortion recently treated by him and L. E. Jones. The paper was well discussed by all members of the society. Dr. Overby being in Chicago taking a post-graduate course, his paper was left over until next meeting. Dr. Cobfield being also absent, his paper was pigeon-holed for the next meeting. Dr. Thomas' paper on La Grippe was next read, giving points on treatment of the special character of la grippe we had this winter in our section. After a general discussion of the paper and reports of some cases the society adjourned to meet the second Wednesday in June.

A. J. BEAN, Secretary.

Jefferson.—The Jefferson County Medical Society met in the Twenty-ninth stated meeting with the president, S. J. Meyer in the chair. Minutes of the previous meeting read and approved. Communication from M. K. Allen, Health Officer, read (regarding appearances of endorsement of certain patent medicine on the official Health Officer letter paper). Report of Committee on Telephone Rates read by F. P. Satterwhite; report accepted and committee continued. The Jefferson County Milk Commission report that they deem it inadvisable to take any action toward incorporation, as the State Pure Food Commission has the matter of pure food and milk in hand. Report accepted.

It was moved by D. S. Wilson, seconded by D. E. Thompson, that a committee be appointed to investigate the advisability of incorporating the Jefferson County Medical Society. Motion carried. Committee appointed—J. G. Sherrill, Chairman; C. H. Harris, J. W. Guest.

Dr. Ravitch presented a Dermato-Ophthalmological case, which was discussed by Drs. Ray, Pfingst and Bloom.

H. H. Grant reported several cases of compound fracture of skull and presented three of the patients. They were discussed by Drs. Sherrill, Vance, and Harris.

The essay of the evening was read by W. T. Bruner, subject, Notes on Newer Remedies Used in Diseases of the Eye. Discussed by Drs. Ray, Cheatham, Dabney, Persey, Hall, Pfingst, Flexner, Bate, and Tuley. At 10:00 P. M. on motion the society adjourned.

C. W. HIBBETT, Secretary.

Todd.—The Todd County Medical Society met at Guthrie April 3rd, 1907. House called to order by president, J. M. Robinson. Minutes of previous meeting read and adopted. The case of medical examinations for Metropolitan Life Insurance Co. was again brought up by Dr. Weathers and again the edict went forth to charge all old line life insurance companies Five Dollars for each examination made (this does not apply to fraternal insurance). The next in order was report of clinical cases. First report by Dr. Robinson of tumor of some kind in man 60 years old. Second, by Dr. Barker, pneumonia followed by empyema, rib resected, drainage made, the operation attempted under local anaesthesia, but patient grew worse and had to resort to chloroform, patient improving. The amount of rib resected was too extensive according to R. W. Frey. Also suggested making incision in Anterior Axillary line which obviates pleural cough. Third case reported by Dr. Frey (previously reported) one of tuberculosis. Patient improving under fresh air treatment. No medicine being used. Fourth case reported by E. M. Frey. Negro man

55 years old. Tumor in epigastrium and Mitral regurgitation. No inflammatory trouble, patient emaciated rapidly and died. Autopsy held and tumor exhibited before the society, and malignancy of same agreed upon. Fifth case, reported by Dr. Taylor. Negro girl, 18 years old with fever, thought to be of malarial origin, later developed pain in neck and shoulder. Case fell into hands of R. W. Frey, later developed tuberculosis, rheumatism, heart lesion, etc. Sixth case by Dr. Barker, pregnant woman suffering with numbness over entire body. No opinion advanced for want of clear history. Seventh case, by Dr. Boyd, old lady with Bright's disease. Help wanted. Dr. Gurer suggests an abundance of water with diuretics. Dr. Barker suggests caffeine with Urotropin. The H. M. C. Anaesthetic was discussed by Dr. Frey. Rehearsal case reported by Dr. Escue. Dr. Frey was called to case that had been in labor one hour, os dilated, size of watch glass, gave one dose and patient was asleep in short time; left patient and was gone 1 1-2 hours, child born while woman slept; no trouble in case of mother, but child was asphyxiated. Was then called to surgical case with Dr. Gurer, gave one full dose and amputated leg while the man slept, patient suffered no inconvenience afterward. Was then called to case of renal calculus, gave full dose, patient went to sleep in 30 minutes and slept an hour or two and waked up wild and raised rough house, thought to be due to the Hyosein. The next was reading of paper by Dr. Barker on Acute Articular Rheumatism, and discussed by Drs. Weathers, Perkins, and White. The line of treatment suggested by essayist indorsed, save suggestion by Dr. Frey of Salicylate of Sodium and Essence of Pepsin in Normal Salt. Sol. by enema and Hot Air Treatment by Dr. Perkins. Dr. Weathers reported case of student with recurrence of pain in region of appendix, some fever and occasional vomiting, diagnosis not clear, also reported case in consultation with Dr. Trabue, woman 18 years old, 7 months pregnant, seized with convulsions. No evidence of labor, was given 1-4 grain morphine and 3 drops croton oil, had several convulsions in short time, and was given 2-8 grains morphine and 3 drops more of croton oil, soon followed with 25 drops Veratrum viridi; after another convulsion, was given 15 drops more of the Veratrum viridi and later 10 drops more, after which convulsions ceased and patient slept for three hours and waked up rational, pulse reduced from 180 to 80 per minute. No dilatation or evidence of labor, patient got along nicely for 10 days, when labor came on and terminated without any trouble, child dead; question was discussed whether or not the labor should have been induced at time of convulsions. Dr. Robinson then reported case of

Neuritis and asked for suggestions in treatment. An Osteopath was suggested, which closed further suggestions and reports, with emphasis.

The following program was arranged for the next meeting:—G. H. Grace, Obstinate Forms of Malaria; B. E. Escus, Typhoid Fever; E. W. Weathers, Care and Treatment of Child During Second Summer. There being no further business the meeting adjourned to meet at Trenton the first Monday in May, 1907.

L. P. TRABUE, Secretary.

Warren.—The regular meeting of the Warren County Medical Society was held in the physicians' club room April 10, 1907 at 1 P. M. The president, W. C. Simmons, presided.

J. H. Blackburn gave a splendid lecture on Intestinal Obstruction, which he classified as acute and chronic, the acute was due to (1) bands—but seldom followed pelvic peritonitis; (2) Volvulus, more common in the sigmoid, on account of the long Mesentery. It occurred more frequently in the aged; (3) Intussusception more common in the young; (4) Internal hernias. The chronic was generally due to tumors, syphilitic ulceration, but an acute attack may be superimposed on the chronic. Symptoms: (1) The pain was sudden, intense and diffused over the abdomen; (2) vomiting, which appears early and is continuous first the contents of the stomach, the bile, finally the contents of the intestine; (3) shock, which is complete and profound; (4) constipation absolute of gas and feces; (5) tympany, if the lesion is high, it is more marked over the epigastric region, it is more general if the obstruction is in the lower bowel.

Each variety of intestinal obstruction was clearly given, also clinical history and symptoms and treatment.

The lecturer ended by reporting a case, a child 5 years old, which terminated fatally, at autopsy there were five invaginations of the small intestines.

A. T. McCormack read a paper on Appendicitis in which he said that this was one condition where the doctor was master. He washed out the bowels and the stomach if vomiting continued. Oil was the only purgative used, salts were harmful; never used opium until after the diagnosis was made. He always operated in the first 48 hours.

T. W. Stone read a paper on Peritonitis. First he gave briefly the anatomy of the peritoneum and then took up the etiology of the disease, which he said was secondary to abscess of the liver, gastric ulcer, appendicitis, pelvic infections. The microorganisms involved were given. He then gave in detail the pathology, symptoms, prognosis, and treatment, which included the medicinal and surgical. He also spoke of peri-

tonitis from abortions and puerperal infection in which he did not think the doctor was alone responsible for septicæmia after parturition. The three papers were fully discussed. It was the unanimous opinion that this was one of the most enthusiastic and earnest meetings of the society.

W. A. Briggs invited the society to meet with him at the new sanitarium Monday, April 15.

L. H. SOUTH, Secretary.

Woodford.—The Woodford County Medical Society held its regular meeting on Tuesday, April 2, 1907. Those present were: — Sleet, Lermann, Stedman, Phelps, Worthington, Halt, Hart, Parker, Crenshaw. The meeting was devoted wholly to business. Dr. Blackburn, the reader of the paper, not being present.

Replies were received from three of the five druggists of the county, all acceding cheerfully to the requests put forth in a type-written preamble and resolutions passed at the regular meeting in March and ordered sent to all the druggists of the county. All the druggists replying—however, suggested that the refilling of prescriptions for parties other than for whom they were originally written could, in their opinion, be easily prevented by the doctor writing on the prescription “not to be refilled” and also by putting the party's name on the prescription. The suggestion was accepted as wise. The following resolution was introduced and unanimously passed, and ordered sent to all the doctors in the county, requesting all to sign and return to the secretary:

Resolved, We, the doctors of Woodford County, agree to give to the Woodford County Medical Society a list of the names of such people as can and will not pay for medical services. This list shall be known as the Information List and we all agree to bind ourselves not to visit such persons professionally, save for one visit only for which we shall demand and obtain, payment in advance and before making any further visits to the said patient of his family, the said patient shall be compelled to arrange satisfactorily for payment of his bill to the physician who has placed his name on the list.

(Signed)

S. M. WORTHINGTON,
S. M. STEDMAN,
W. C. PARKER,
R. M. PHELPS,
R. S. HART,
J. P. HOLT,
W. E. SLEET,
J. S. LEHMAN,
J. W. CRENSHAW.

The society adjourned to the day of regular meeting the 7th of May, 1907.

J. W. CRENSHAW, Secretary.

COUNCIL OF PHARMACY.

SOMNOS.

The manufacturers of somnos have been claiming that their preparation is a definite "chemical product formed by the synthesis of chlorethanal with a polyatomic alcohol radical." Very few, if any, physicians who read this description realized that chlorethanal is another name for chloral and that a polyatomic alcohol radical, in this instance, meant glycerin. In the *Journal of the American Medical Association* for Sept. 1, 1906, attention is called to the actual facts in regard to this preparation in a comment on the circular letter published by the H. K. Mulford Company. In the literature regarding the physiologic action of Somnos the H. K. Mulford Company claimed that it has no "depressive action on the heart or circulation and has no destructive influence on the red corpuscles of the blood, nor does it cause gastric disturbances by continued use." The literature also repeatedly said that it contained no chloral and that it was free from the bad effects of chloral.

The Council on Pharmacy and Chemistry, in the *Journal A. M. A.* for Sept. 15, publishes a report of investigations that were made on mice, guinea-pigs and dogs for the purpose of proving or disproving the claims made for Somnos by its manufacturers. The result of the investigation showed that the physiologic action of Somnos is practically indistinguishable from that of a 5 per cent. solution of chloral hydrate.

According to the reports, Somnos is no less toxic than chloral hydrate, and the depressing effects on the temperature, respiration and circulation are the same in each instance. The Council suggests that physicians who are in the habit of using Somnos should compare the results they obtain from it with a 5 per cent. elixir of hydrate of chloral. In this way they can verify for themselves whether or not the Council's conclusions are correct, that a 5 per cent. elixir of chloral glycerate (Somnos) has the same physiological and therapeutical action as a 5 per cent. elixir of chloral hydrate.

TYREE'S ANTISEPTIC POWDER.

(From the *Journal A. M. A.*, Oct. 20, 1906.)

REPORT OF THE COUNCIL OF PHARMACY AND CHEMISTRY.

Tyree's antiseptic powder was assigned for examination to a subcommittee of the Council which made the following report:

To the Council on Pharmacy and Chemistry: Your subcommittee, to whom was assigned Tyree's Pulv. Antiseptic Comp., mar-

keted by J. S. Tyree, Washington, D. C., reports as follows:

The label on the package states: "This preparation is a scientific combination of borate of sodium, alumen, carbolic acid, glycerin and the crystalized principles of thyme, eucalyptus, gaultheria, and mentha, in the form of a powder," etc.

The statement that the powder contains the crystalline principles of thyme, eucalyptus, gaultheria, and mentha is vague and misleading, since the chief medicinal constituents of eucalyptus and gaultheria are liquids, but it tends to convey the impression that the powder contains the essential constituents of these drugs, namely, thymol, oil of eucalyptus, or eucalyptol, oil of wintergreen, or methyl salicylate, and menthol.

The literature supplied to physicians claims its composition to be: "Parts. sod. bor., 50; ac. carbol., 5; glycerin, 6; the cryst. principles of thyme, 5; eucalyptus, 5; gaultheria, 5, and mentha, 5."

The composition, therefore, might be expressed as follows:

Sodium borate (borax) .50 parts, or 38.46 per cent.

Alum—50 parts, or 39.46 per cent.

Phenol (carbolic acid)—5 parts, or 3.85 per cent.

Glycerin—5 parts, or 3.85 per cent.

Thymol—5 parts, or 3.85 per cent.

Oil of eucalyptus or eucalyptol—5 parts, or 3.85 per cent.

Oil of gaultheria (or methyl salicylate)—5 parts, or 3.85 per cent.

Menthol—5 parts, or 3.85 per cent.

Analysis of specimens purchased from different sources in the open market were made under our direction. The reports of the chemists show that Tyree's antiseptic powder contains no borax, or mere traces only, and that it contains no alum, or mere traces only. Instead, the analyses show that boric acid and zinc sulphate are the essential constituents. The amounts of carbolic acid, thymol, menthol, etc., contained in the powder, if present, were far below the quantities indicated by the formula. The presence of glycerin could not be demonstrated, and if present the amount must be very small.

One chemist reports:

The result of analysis shows that different samples differ slightly in composition, but that the following indicates the average composition of the product:

Per cent.

Zinc sulphate, anhydrous15.56

Boric acid81.26

Volatile matter at 100°C for four hours. 0.45

The undertermined portion consists of salicylic acid, carbolic acid, menthol and eucalyptol: possibly other antiseptic agents may be present in very minute quantities.

From the above findings we conclude that Tyree's antiseptic powder is a mixture of boric acid and dried zinc sulphate and antiseptic bodies, such as menthol, salicylic acid and carbolic acid, eucalyptol, etc. From this it can be readily seen that the label which is supposed to set forth the composition of Tyree's antiseptic powder is not in accord with the facts. The powder does not contain either borate of sodium or alum, and the presence of glycerin could not be established. The antiseptic agents, exclusive of the boric acid, are present only in small amounts.

The report of another analyst concludes as follows:

It evidently contains less than the amount stated of the principles of thyme, eucalyptus, wintergreen and mint. It also contains a very small amount indeed of carbolic acid, much less than that stated. We have been unable to identify certainly the presence of glycerin, and it is doubtful if it be present.

From the result of the analysis we feel confident that the preparation is to all intents and purposes a mixture of boric acid and sulphate of zinc.

The carbolic acid, thyme, eucalyptus, wintergreen, etc., if present, are present only in sufficient amount to give the compound a satisfactory odor.

In view of the fact that J. S. Tyree has given wide publicity to a formula which the preceding report has shown to be a deliberate misrepresentation of facts, it is recommended that the article be refused recognition by the Council on Pharmacy and Chemistry, and that this report be published in the Journal of the American Medical Association.

The recommendation of the subcommittee was adopted by the Council in accordance with which the report is published.

W. A. PUCKNER, Secretary.

In a letter to the editor of the Journal of the American Medical Association, Mr. Tyree admits changing the formula of the powder, and says that it had been his intention to state to the medical profession his reasons for making the change. Mr. Tyree does not state whether the change was made one year ago or five years ago, but the sample for the first analysis was purchased last February, and the first chemist's report was submitted to the Council March 5, 1906. On April 4, Mr. Tyree was notified by the Council that the composition of "Tyree's Anti-

septic Powder" did not correspond with the formula published by him.

Whether or not Mr. Tyree is justified in offering our profession a preparation as composed chiefly of borax and alum, when in reality it is composed of boric acid and zinc sulphate, we leave physicians to judge.

ARGYROL.

A compound of a derived proteid and silver oxide, containing from 20 to 25 per cent. of silver.

Actions and Uses.—Solutions of argyrol (20 to 50 per cent.) are said to be non-irritating to mucous membranes. Taken internally it is said to be non-toxic. It is claimed to be an antiseptic. It is recommended in urethritis and cystitis, in conjunctivitis and in affections of the nose, throat and ear. Dosage.—It is employed in from 10 to 25 per cent. and even stronger solutions. Manufactured by Barnes & Hille, Philadelphia.

EPICARIN.

Epicarin, $C_6H_3(OH)(COOH)(CH_2C_{10}H_6OH) 2:3:1 = C_{18}H_{14}O_4$, *B*-naphthol-hydroxy-toluic acid.

Actions and Uses.—Epicarin is a non-poisonous antiseptic and parasiticide. Administered internally, it is excreted mostly undecomposed. It has been found useful in the treatment of skin diseases, particularly scabies, tinea tonsurans, prurigo and certain forms of eczema. Dosage.—It is used externally only in the form of 5 to 20 per cent. ointment, with petrolatum or wool fat (lanolin) as base, or in the form of oily or alcoholic solutions (10 per cent.). Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York).

ERYTHROL TETRANITRATE.

Erythrol tetranitrate, $C_4H_6(NO_3)_4 = C_4H_{12}N_4O_{12}$, the tetranitrate of erythrite or butane-tetrol, $C_4H_6(OH)_4$.

Actions and Uses.—It is a vasodilator and antispasmodic, like nitroglycerin. Its action is slower and more lasting; it begins in 15 minutes and persists for three or four hours. It is recommended in angina pectoris and cardiac diseases. It is reported as especially useful as a prophylactic in preventing anginal pain. Dosage.—Because of its explosiveness it is marketed in the form of tablets, each containing 0.03 Gm. ($\frac{1}{2}$ grain). One or two tablets every four to six hours. Manufactured by E. Merck, Darmstadt (Merck & Co., New York).

ETHYLENEDIAMINE.

Ethylenediamine, $C_2H_4(NH_2)_2$, a substitution compound of ethylene and ammonia.

Actions and Uses.—It is said to be non-corrosive. It is recommended as an albumin solvent for the solution of false membranes in diphtheria and similar affections of the mucous membranes. It is recommended for use in the form of kresamine (which see). Manufactured by Chemische Fabrik auf Aetien, vorm. E. Schering, Berlin (Schering & Glatz, New York).

EUCAINE.

The "Eucaines" are two closely allied synthetic bases, which were originally differentiated as eucaine "A" and eucaine "B," but are now designated as "Alpha-eucaine" and "Beta-eucaine," respectively, alpha-eucaine being a synthetic derivative of triacetoneamine, while beta-eucaine is a synthetic derivative of vinyl-diacetonekalmine. Both of these bases are supplied as hydrochlorides and are recommended as substitutes for cocaine, over which they are claimed to have certain advantages. They are described under alpha-eucaine hydrochloride and beta-eucaine hydrochloride.

FRAUD AND DECEPTION IN PREPARATIONS OF COD-LIVER OIL.

The Journal of the American Medical Association, Oct. 13, 1906, exposes the fraud and deception practiced by certain proprietary firms in putting on the market preparations purporting to contain cod-liver oil, when, in fact, they contain no oil at all. It is conceded by pharmacologists that the value of these remedies depends on the nutritive power of the fat, and any preparation which contains fat must respond to simple tests which the physician can personally apply. The preparations claiming to represent cod-liver oil are in liquid form, and if they contain oil it must be in one of the following forms:

1. An emulsion of the oil which may be miscible with water, but from which the fat tends to separate and rise to the top. In this form the fat can be seen as globules under the microscope.

2. A solution, resulting from the saponification of the oil, containing a soap which usually will be alkaline in reaction, especially when mixed with water, and from which fatty acids are separated as a precipitate when the solution is acidified.

3. A solution of fatty acids. This will be acid in reaction, and will be precipitated by the addition of water, in which the fatty acids are not soluble.

An examination of one of these preparations, e. g., Waterbury's Metabolized Cod-Liver Oil, which, it is claimed, "contains the

metabolized product obtained by the action of ferments on cod-liver oil," shows that it is neither an emulsion, a solution of soap, nor a solution of fatty acids, and more careful analysis shows that it contains no fat or acids (except the merest traces). No intelligent physician should be misled by the extravagant and unfounded claims made for this preparation.

Hagee's Cordial of Cod-Liver Oil is a representative of a class of preparations which claim to "represent the oil, but contains no fat," and are therefore practically worthless. The claims of therapeutic value for such preparations can not be substantiated. Some such remedies are advertised as extracts of cod-liver oil, when, in fact, they are made from cod livers, but not from cod-liver oil. These preparations, if honestly made, might be worthy of a trial, but they are not preparations of cod-liver oil, and should not be so termed. So far as we know, however, no satisfactory evidence is forthcoming that such extractives have any therapeutic value.

The attempt to modify cod-liver oil for therapeutic purposes, may be pronounced a failure and the large variety and extensive sale of these preparations appear to be owing to the fact that physicians do not recall the ordinary facts of chemistry, but accept too readily the statements of the manufacturers.

PROPRIETARY PREPARATIONS APPROVED BY COUNCIL OF PHARMACY AND CHEMISTRY.

ARISTOCHIN.

Aristochin.— $\text{CO} (\text{C}_{20}\text{H}_{23}\text{N}_2\text{O}_2)_2 = \text{C}_{41}\text{H}_{46}\text{N}_4\text{O}_5$, the neutral carbonic ester of quinine.

Actions and Uses.—The same as those of quinine, but, since it is only slowly acted on by acids, it is said not to produce disturbance of the stomach and to be notably free from tendency to production of cinchonism.

Dosage.—The same as that of quinine, in powder, mixed with milk sugar, dry on the tongue or suspended by liquids. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color and Chemical Co., New York).

ARISTOL.

A name applied to Thymolis Iodidum, U. S. P. Manufactured by Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York).

ASPIRIN.

Aspirin $\text{C}_6\text{H}_4\text{O} (\text{CH}_3\text{CO}) .\text{COOH}$, 1:2 = $\text{C}_9\text{H}_8\text{O}_4$, the acetyl derivative of salicylic acid.

Actions and Uses.—It acts like salicylic acid, over which it possesses the advantage of

producing less of the undesired local and systemic side effects, on account of the slow liberation of the salicylic acid. It passes the stomach unchanged, the decomposition beginning in the intestine. Dosage.—0.3 to 1 Gm. (5 to 15 grains) in capsules or wafers, or dissolved in sweetened water or dry on the tongue, followed by a swallow of water. The powder should be dispensed in waxed paper. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York).

BENZOSOL.

Benzosol, $C_6H_4(OCH_3)(C_6H_5COO) = C_{14}H_{12}O_3$, a crystalline compound of guaiacol in which the hydrogen of the hydroxyl is replaced by benzoyl.

Actions and Uses.—Benzosol is decomposed slowly in the intestinal tract into guaiacol and benzoic acid which exert their proper actions. The liberated constituents are absorbed and excreted in the urine. It is not irritating. Its uses are analogous to those of creosote and of benzoic acid. It is recommended in incipient pulmonary tuberculosis, as an intestinal antiseptic in fermentation, diarrhoea, typhoid fever, diabetes mellitus and as a urinary disinfectant in cystitis, etc. Dosage.—0.2 to 0.6 Gm. (3 to 10 grains), in powder, capsule, pill, or suspended in liquids or as an emulsion. Manufactured by Farbwerke, vorm. Meister, Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

BETA-EUCAINE HYDROCHLORIDE.

Beta-eucaine hydrochloride, $C_5H_7N(CH_3)_3(C_6H_5COO) \cdot HCl$, the hydrochloride of 2,6,6-trimethyl-4-benzoyl-hydroxypiperidine. **Actions and Uses.**—Beta-eucaine hydrochloride is a local anesthetic like cocaine, but weaker and devoid of the stimulating properties of the latter. It does not dilate the pupil, nor does it contract the blood vessels as does cocaine. It has the advantage of stability even on prolonged boiling. It may be used in all cases in which cocaine is indicated as a local anesthetic, especially in ophthalmology. Dosage.—It may be applied in a 2 to 3 per cent solution to the eye, 5 to 10 per cent. for nose and throat, and 5 to 10 per cent. for ointment for hemorrhoids. Manufactured by Chemische Fabrik auf Actien, vorm. E. Schering, Berlin (Schering & Glatz, New York).

BETA-NAPHTHOL BENZOATE.

Beta-naphthol benzoate, $C_6H_5 \cdot COO \cdot C_{10}H_7 = C_{17}H_{12}O_2$, the benzoic ester of *B*-naphthol.

Actions and Uses.—Beta-naphthol benzoate

is split up into its constituents on reaching the intestinal tract and acts as an antiseptic. It is said to be diuretic. It is used internally as an intestinal antiseptic in diarrhoea and typhoid fever. Externally it has been recommended as a parasiticide in the form of 3 to 10 per cent. ointment, and has been used in psoriasis, eczema, scabies, etc. Dosage.—0.2 to 0.5 Gm. (3 to 8 grains); maximum dose, single, 1 Gm. (15 grains), daily 4 Gm. (60 grains). Manufactured by Fabrik von Heyden, Radebeul near Dresden (Merck & Co., New York).

BETOL.

Betol, $C_{10}H_7 \cdot OH \cdot COO(C_{10}H_7) = C_{17}H_{12}O_3$, the salicylic ester of *B*-naphthol.

Actions and Uses.—Betol is not affected in the stomach, but is split up in its original components when it reaches the intestinal tract by the pancreatic juice and intestinal secretions. It is believed to act as an intestinal antiseptic and, being excreted in the urine, to act in a similar way in the bladder. It has the anti-rheumatic properties of salicylic acid. It is recommended for intestinal fermentations, catarrh of the bladder, particularly in gonorrhoeal cystitis, for rheumatism, etc. Dosage.—0.3 to 0.5 Gm. (4 to 8 grains) in cachets, milk or emulsion. Manufactured by the Heyden Chemical Works, New York.

BISMAL.

Bismal, $4(C_{15}H_{12}O_{10}) \cdot 3Bi(OH)_3 = Bi_3C_{60}H_{57}O_{40}$, a compound of bismuth hydroxide and methylenidigallie acid.

Actions and Uses.—Bismal is an astringent and is recommended for the treatment of chronic diarrhoea. Dosage.—0.12 to 0.3 Gm. (2 to 5 grains) in cachets or powder. Manufactured by E. Merck, Darmstadt (Merck & Co., New York).

BOROCHLORETONE.

A mixture of 1 part chloretone with 3 parts boric acid.

Actions and Uses.—An antiseptic and anesthetic, used externally as a surgical dressing powder. Prepared by Parke, Davis & Co., Detroit, Mich.

BROMETONE.

Brometone, 1,1,1-tribrom-2-methyl-propan-2-ol, $CBr_3 \cdot C(OH)(CH_3) \cdot CH_3 = C_4H_7OBr_3$, produced by the reaction of acetone on bromoform.

Actions and Uses.—Brometone is claimed to have the sedative action of the bromides without the disadvantage of producing bromism. In doses of 0.3 Gm. (5 grains) four or five times a day, in adults, it is claimed to cause no unpleasant results and to produce no disturbance of the digestive organs, and

to have no appreciable effect on the secretions. Its action is prompt and its effect is manifest for several hours. In doses exceeding 1.6 Gm. (25 grains) daily it may produce dizziness, vertigo, anorexia, and mental hebetude, all of which symptoms disappear on discontinuance of its use. Therapeutically it has been recommended in mild conditions of excitation and insomnia, in so-called narcotic abstinence, in hysteria and in nervous affections generally. It relieves some forms of cough and is said to produce amelioration in about 60 per cent. of cases of epilepsy. It has been used to relieve dizziness due to labyrinthine disturbances. Dosage.—The dose is 0.3 Gm. (5 grains), to be repeated two or three times during twenty-four hours. Manufactured by Parke, Davis & Co., Detroit, Mich.

BROMIPIN.

A bromine addition product of sesame oil, containing 10 per cent. of bromine in organic combination.

Actions and Uses.—Bromipin acts like the bromides, but as it yields its bromine more slowly it is thought to have less tendency to produce bromism. The combination is not broken up in the stomach, but a portion of the bromine is split off as soon as the oil enters the intestine. The oil with the remaining bromine is easily absorbed, and, similarly to other fats, is largely deposited in the tissues, where it is slowly split up. It is said to be more lasting in its action than the bromides. Dosage.—4 Ce. (1 fluidram), increased in case of epilepsy to from 8 to 32 Ce. (2 to 8 fluidrams); in emulsion with peppermint water and syrup, or pure, flavored with oil of peppermint. Manufactured by E. Merck, Darmstadt. (Merck & Co., New York).

BROMIPIN 33 1-3 PER CENT.

A 33 1-3 per cent. brominized sesame oil. Manufactured by E. Merck, Darmstadt. (Merck & Co., New York).

BUTYL-CHLORAL HYDRATE.

Actions and Uses.—Its action is similar to that of chloral, except that it is said to be less depressing and more analgetic. It has been especially recommended for facial neuralgia. Dosage.—0.3 to 1.3 Gm. (5 to 20 grains).

CALCIUM ICHTHYOL.

A derivative of ichthyol in which calcium is substituted for ammonium. Manufactured by the Ichthyol Co., Hamburg. (Merck & Co., New York).

CALOMELOL.

A soluble colloidal form of calomel, containing albuminoids.

Actions and Uses.—Its action is the same as that of calomel, but it is claimed to be superior because of its solubility in water, acting more rapidly and efficiently. Calomelol is claimed to be non-irritant and particularly non-toxic. The indications for its use are the same as for calomel. Dosage.—Internally the same as calomel. Externally it is used as a dusting powder, mixed with an equal quantity of starch or of a mixture of starch and zinc oxide, or in the form of calomelol ointment. It should be guarded from the light. Manufactured by the Heyden Chemical Works, New York.

CALOMELOL OINTMENT.

Actions and Uses.—It is a substitute for mercurial ointment, over which it has the advantage of cleanliness, and it is claimed to be distinctly superior as an inunction in syphilis, etc. Dosage.—6 Gm. (90 grains) daily for inunction in syphilis. Manufactured by the Heyden Chemical Works, New York.

CASCARA EVACUANT.

A preparation said to contain a bitterless glucoside, obtained from the bark of *Rhamnus purshiana*, with aromatics.

Actions and Uses.—It is claimed that this preparation possesses the laxative properties of cascara sagrada without the bitterness which characterizes the ordinary extract. It is recommended for the treatment of chronic constipation, for which cascara sagrada is one of the best medicinal agents. Dosage.—As a laxative, 0.6 to 1 Ce. (10 to 15 minims) three times a day; as a purgative, 1.3 to 2 Ce. (20 to 30 minims) morning and evening. 4 Ce. (1 fluidram) may be given in obstinate cases. Prepared by Parke, Davis & Co., Detroit, Mich.

CASCARA TONIC LAXATIVE GLOBULES.

Each globule is said to contain 0.2 Gm. (3 grains) of the bitter glucosides of *Rhamnus purshiana* suspended in a bland fixed oil, to which aromatics have been added.

Actions and Uses.—The manufacturers claim that it combines the laxative action of cascara with tonic properties of the bitter principle with the advantage of concealment of the disagreeable taste. Dosage.—One or two globules to be taken before retiring. Prepared by Parke, Davis & Co., Detroit, Mich.

Return to Halse

KENTUCKY

MEDICAL

JOURNAL



Being the Journal of the Kentucky State Medical Association.

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See Page IX For the Next Meeting of Your County Society.

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VOL. V, No. 5.

JUNE, 1907.

\$2.00 YEARLY.

A. M. A.

The Kentucky State Medical Association Special train to Atlantic City will leave Louisville Sunday morning, June 2. Delegates and others desiring to attend special meetings will leave Saturday morning at the same hour. Be sure to see that your ticket reads by the B. & O. S. W. R. R. This is the road that patronizes our Journal and is the one we should help. If you are detained, you can leave Louisville Monday morning and still get to Atlantic City in time for the meeting. If you prefer you can get your ticket by the L. & N. to Cincinnati and then by the B & O. This will be the greatest medical meeting ever held. You should attend. Write to Col. R. S. Brown, care B. & O. R. R., Louisville, to reserve sleeper. Arrange in advance with your local ticket agent for round trip ticket, which should cost one fare plus two dollars. You can get a stop-over at Philadelphia, at Washington, or both, and go to the Jamestown Exposition also if you care to do so.

NON-MEDICAL EXAMINATION OF DRUGS A NECESSITY.

Arguments multiply as to the necessity for every physician limiting his medicinal agents to the standard preparations of the United States Pharmacopoea and the National Formulary, using in addition only such preparations—proprietary or otherwise—as have been examined and approved by some such disinterested body as the Council on Pharmacy and Chemistry of the American Medical Association. Complaint has come from some

quarters of the personnel of the Council, that it is composed in large measure of scientific chemists and pharmacists and has too few practicing physicians in its membership. It would be difficult to please most of the Council's critics by selecting any sort of high-grade, capable men as successors to the present excellent Council, but it impresses us that this criticism is particularly ill founded. Practicing physicians have been using such proprietaries as lactopeptine for many years, and many of us feel very foolish as we glance over our prescription files and find that we had our patients pay far too much for a cheap and frequently inert imitation of a standard pharmacopoeal preparation, and yet few of us realized this until it was officially announced by the Council. In the same way thialion, the impossible combination of digestive elixirs, the tasteless wines and other mixtures of cod liver oil, all of them entirely, or almost, without a particle of oil or fat of any sort, have all been used by us as practicing physicians, and whatever sort of scientific commission or investigation it takes to find these things out and show them to us so plainly that we shall be freed from the burden of prescribing proprietary drugs of whose action or composition we know absolutely nothing beyond the outrageous claims made by their vendors, will do unlimited service to our profession. Very few physicians are so trained as to be capable of making accurate analyses of organic drugs, and the necessity for such training is slight, but it is just as reasonable for us to employ chemie and pharmaceutic experts to examine the stuff offered for our use on our human friends, as for Rockefeller to have experts examine an oil field or Roger a copper region, before they invest their money. Remember always that no drug or medicine

should be used about whose physiological and therapeutic action or chemic composition you are ignorant. Then use enough of it in sufficient dosage to get the result you are after, and your success as a healer of disease is assured. Let the materia medica teachers and investigators find on dogs and cats the uses of the proprietaries and confirm them on their hapless patients. The plain old galenicals and their alkaloids are good enough for us

IMPORTANCE OF THE NEXT LEGISLATURE.

Every session of the Legislature for years has given grounds for much anxious thought to the profession of Kentucky. This was as much due to the necessity of defeating plausible, insidious, but none the less vicious legislation, degrading to the profession and still more dangerous to the best interests of the people, as to the importance of the measures proposed to perfect and strengthen our system of medical laws, under which far better results have been secured than in any other state in the Union. For instance, four years ago, a bill was prepared and so supported by the State Board of Pharmacy that it was almost slipped through, permitting the disreputable clog dancing nostrum vending companies to return to the state upon payment to that Board of an annual license fee of fifty dollars. The only excuse made for this was that the Board needed the revenue it would bring in. Similarly, at the last session, a persistent effort was made week after week to slip through an amendment, ostensibly in the interest of the osteopaths, but to which they most strenuously objected, which would have broken down our law in its most vital parts.

The most effectual safe-guard against this constantly recurring danger is in our county societies. A doctor, and especially a country doctor, has far more political power than any other man in his community, and he is far more potent because he has no selfish ends to serve. The health and medical legislation he seeks to foster and promote are for the protection of the best interests of the people, supported upon his part from a sense of public duty, the only possible selfish motive attributable to him being the desire to protect the good name of the profession by excluding from it the incompetent and the unfit. The chief danger to us, as to the people in all other branches of legislation, is from ignorance of the men selected as law makers. By wise concert of action the profession should

assist the dominant political party in each county in selecting and nominating only high-class men for this duty. This duty is equally imperative in the selection of judicial officers, from the lowest to the highest courts, who are likely to be called upon at any time to construe and execute the law. If this could be taken up and discussed in each county society and each member could be induced to explain the purposes of the legislation, its importance to the people and the unselfishness of the profession in supporting it, to each candidate for these offices, and to inquire his feelings in regard to these laws while he is a candidate it would only be a question until almost ideal results would be had and made secure. It is especially important that all of this be done in such an organized and united way as to make the influence of every physician effective, and yet in such a manner as is consistent with the honor and dignity of our profession, and as will do good instead of harm. Doctor, will you make a note of this and bring it up for discussion at the next meeting of your society, and then take it up quietly and privately with your candidates for senator and representative and for all judicial offices at the first opportunity?

WHAT TO CHARGE.

One of the most valuable lessons I have ever learned is that one's patients value one's services in proportion to what is paid for them. Of course that valuation must be assessed with some reason. If you do little, charge little. If you are doubtful about the diagnosis, use ready-made mixtures in your treatment as a cloak for your ignorance of materia medica and are generally shaky about what you know and do, your fees should be, and probably are, very small. Under these circumstances you will find it a good investment, from a purely financial standpoint merely, to take a post-graduate course in one of our medical centres. There is no better than the Polyclinic in New York, of which Dr. Jno. A. Wyeth is President, and whose announcement appears in another column. If, on the other hand, you do understand the patient's condition, do know how to treat him and do relieve him, saving his life or, what is more, from chronic invalidism, make your fee in proportion to the work you have done in acquiring the knowledge which has been so useful.

Worthless doctors charge small fees, is axiomatic.
J. O. C.

THE NOSTRUMS.

"A nostrum is a medicine the ingredients of which, *and the method of compounding them*, are kept secret for the purpose of restricting the profits of sale to the inventor or proprietor." In giving the above definition the Century Dictionary, also says, in regard to the definition of the term, that the name is supposed to refer to the habit of quacks and other advertisers of claiming special virtues for their wares as "our own make." A proprietary medicine is defined by the same authority as "a medicine the manufacture or sale of which is restricted through patent of the drug or combination of drugs, of the label, of the name, or otherwise, or a medicine concerning which the person making it claims a private formula." Singularly alike, are they not?

It seems clear to us that both come under the ban of that section of the Principles of Ethics which declares that "it is equally derogatory to professional character for physicians * * * to dispense, or promote the use of, secret medicines, for if such nostrums are of real efficacy, any concealment regarding them is inconsistent with beneficence and professional liberality, and if mystery alone gives them public notoriety, such craft implies either disgraceful ignorance or fraudulent avarice."

The following list of advertisements is taken from a well-known New York medical journal, whose editor is a great pharmacologist as well as publicist and physician.

Hydroleine, Betul-ol, Vin Mariani, Bovinine, Grays Glycerine Tonic Comp., Colechisal, Peptomangan, Hydrozone, Digalen, Cerevisene, Ergoapiol, Fellows Syrup, Hypophosphites Comp., Antiphlogistine, Anascarein, Neurotonic tablets, Mercauro, Arsenauro, and, lastly, and, perhaps incongruously, the Marvel Syringe.

We will deliver a prize to the reader who will best tell which are nostrums and which proprietaries in the above list, and who can give any possible or plausible reason why every one of them is not forbidden under one or the other clause of the above quotation from the Principles of Ethics. If they are honest preparations, why have they not been approved by the Council of Pharmacy and Chemistry? Let us Kentuckians cut out both nostrums and proprietaries and stick to the pharmacopeal and standard products in the treatment of our patients.

TO THE CHAPTER GRAND.

In the past few months it has been the peculiar misfortune of the Kentucky State

Medical Association to lose four of its leaders. In Robert M. Coleman, Claiborne J. Walton, Frank H. Gaines, and Frank J. Taylor the Heavenly Hosts have acquired four of the best men who had lived. All of the quartette were stricken while in active practice in the profession which they had loved and honored. To these men, in large measure, had been due the success of medical organization in their respective counties. Drs. Gaines and Walton had been the referees in their counties since the passage of the first medical law. Each of the four had served on his county board of health almost continuously since the State Board was organized in 1878. Such men must be our exemplars. Their names, inscribed with the other immortals of our Association, will but beckon those of us left behind onward and upward. While here let their memories teach us to do each duty well, that, as the roll call proceeds from day to day and year to year, we may each be as well prepared when our turn comes.

A DICTIONARY.

Every practicing physician needs, indeed must have, a comprehensive medical dictionary. There is much difference between an encyclopedia and a dictionary. In the latter one expects concise, but complete definitions of words, and phrases or idioms. Especially at this time when all of our organized bodies considering or actually attempting post-graduate work by their component units, is such a work a necessity. It is impossible for anyone who has been out of college many years to read many of the modern scientific advances without some such handy reference work. The Appletons, whose announcement is always on our front cover page, have published just such a work in their medical dictionary. It is a wonderfully useful book and it is a pleasure to commend it to our profession.

PRACTICE.

If you do not understand therapeutics you should attend school. Taking it for granted that you can make a diagnosis like an Osler, an autopsy like a Flexner, a prognosis like a Starr, you are of little value to your patient if you cannot treat the pathologic condition from which he suffers. This is the distinction between the medical scientist and the physician. The former does a grand work. He proves or disproves the work of the latter or shows him the way. But if you are a practicing physician and are treating sick people your chief function is as a therapeut-

ist. If you do not know that infected gall bladders containing gallstones demand surgical intervention, that antitoxin is the main reliance in the treatment of diphtheria, that quinine is a specific for malaria and that the only treatment for certain classes of appendicitis is surgical, you do not understand therapeutics and should take up the study of that branch. If you do not understand the physiologic action of sodium chloride or of ergot, read what Dr. Simpson says about the former in the May JOURNAL, or what Dr. Holloway writes in regard to the latter in this issue. If you do not know the physiological and therapeutic action of any drug or nostrum, *quit using it*. If you do not know how to treat disease, you are doing an injustice to yourself and the unfortunates under your care every day you hold yourself out as a physician.

A MEDICAL JOURNAL.

It is a real pleasure to read such a medical publication as the West Virginia Medical Journal. The June number has just come to hand, issued early in order to announce the approaching meeting of its State Association. From cover to cover it is worth reading. Its advertising columns are clean and its editorials decisive and interesting. The profession of West Virginia must take great pride in such an editor as Dr. Jepson and such a publication as its *Journal*.

SCIENTIFIC EDITORIALS.

RECENT ADVANCES IN SURGERY OF THE NERVOUS SYSTEM.

By JOHN R. WATHEN, LOUISVILLE.

Sir Victor Horsley (British Med. Jour.), in a recent address on Surgery of the Central Nervous System, says: "In fact the advance in technique of the surgical treatment of diseases of the brain and the spinal cord has been relatively less than the improvement in our knowledge of the seat and nature of the diseases for which surgical intervention is useful and necessary. Correct diagnosis in diseases of the nervous system is still far to seek, and yet operative treatment in such a difficult field is often expected to yield as good results as the relatively easier and simpler work of curing hernia or removing abdominal tumors. It will soon appear of what immense importance it is to the community that the study of neurology should be pushed forward by every means in our power in order that the earliest commencement of a

tumor of the brain should be determined as certainly as that of one nearer the surface of the body. But the twenty years of medical and surgical work which have passed have done more than improve our topographical knowledge of the probable seat of encephalic lesions, they have taught us from the operating theatre what previous generations had never learned in the post-mortem room—namely, a great deal of the vital pathology and true anatomical nature of brain disease. How often we see the nature, structure and treatment of cerebral tumors discussed on the basis of such growth as are seen at autopsies, that is, when they have reached such a maximal degree of development as to have caused death. Post-mortem records can never teach what the careful study of the living tumors exposed in an operation can demonstrate, since in almost every case the former condition is practically what we may term "inoperable." Many of our advances in the operative treatment of cerebral tumors has been made possible by the late experimental researches of the physiologist and also to a better technique in exposure of the contents of the skull.

In discussing those cases suited to surgical treatment Frazier (Progressive Medicine) has recently written: "The term operable tumor should, I think, be restricted to those cases in which the tumor is accessible, and of such a character as to enable it to be removed without undue risk to the patient's life. In this category, therefore, would be included tumors situated on the cortex or immediately beneath the cortex, tumors taking their origin from the dura, from the meninges, and tumors that are not of the infiltrating type. If a tumor is found to be very vascular and of the infiltrating type, I am quite sure that no attempt whatsoever should be made to extirpate it. The attending hemorrhage may prove fatal, and if the patient survive the operation and the tumor has been but imperfectly removed, the rate of growth will be very much more rapid than prior to the operative interference. Too much stress cannot be laid upon the importance of diagnosis, in order, as Horsley says, that the earliest commencement of a tumor of the brain may be determined as certainly as that of one nearer the surface of the body. As to the time of operation, the day has passed when surgical treatment should be regarded as the *dernier ressort*. When the symptoms point to the existence of a gross organic lesion of the brain and cure has not been effected by an energetically applied course of medical treatment for a period of not longer than six or eight weeks, as in cases of suspected

syphilis, operation should be resorted to.

Bruce (*Annals of Surgery*) has recently written concerning the symptoms: — "The classical symptoms of tumor of the brain are: Optic neuritis (what usually ends in total blindness); severe headache; and vomiting,—all of which symptoms, being dependent on pressure, can be relieved or entirely removed by a free opening in the skull and dura matter. The most serious symptom of all is, of course, optic neuritis on account of its resulting in blindness; and if there is any means of averting this dreadful calamity it is our duty to employ it. The most important factor in the production of optic neuritis is increase of intracranial tension, and consequently Horsley found that the optic neuritis rapidly subsided after opening the skull and the dura matter."

The mortality from operations for tumors of the brain has been due to shock and sepsis. These can, with the present perfect technique be greatly avoided by lessening the time of operation, a careful avoidance of hemorrhage and drainage. It has been clearly demonstrated that infection at the time of operation is rare, but when continued drainage is employed, and we do not obtain a primary union without a drain, fatal infection is very liable to occur.

Surgery of the brain and spinal cord was formally limited to those traumatic conditions, which clearly demanded operative interference, but with our better knowledge and improved technique many conditions, as tumors, abscesses, etc., not to mention such operations as the removal of the Gasserian ganglion for trifacial neuralgia, have been benefited or permanently cured. Gray (*Annals of Surgery*), has recently well written: — "Brain surgery is still in the hands of the general surgeon, assisted in diagnosis frequently by the neurologist, and while not in itself a specialty, calls, perhaps for more special knowledge and skill than any other branch of general surgery. From the close anatomical proximity of the organs of special sense to the brain and the relation of their different pathologies to various brain lesions, the eye, ear, and nose specialists, in particular, find their operative work often concerned with the brain and its envelopes, and consequently must be familiar with the principles and technique of this subject. They should also be able to dissect the triangles of the neck in case of sinus thrombosis."

John B. Murphy (*Surgery, Gynec. and Obstetrics*), recently in a very elaborate paper upon Neurological Surgery, in which he discussed the advances in our knowledge

of the surgery of the spinal cord, draws the following conclusions:—"Hemorrhage, concussion, and contusion of the cord without laceration may offer the same immediate symptomatic picture as that of division, so that a positive differential diagnosis may be practically impossible. There is no direct relationship between the severity of the trauma and the degree of lesion in the cord. The element of time and the order of appearance of symptoms are of great importance, and may be the only guide in the differential diagnosis. Absence of paralytic symptoms immediately after spinal trauma does not justify the surgeon in assuring the patient that such symptoms will not appear. They may set in within a few days, or even some weeks, after the injury. If paralysis is due to haemorrhage, the condition may be relieved by early spinal puncture.

Intra-arachnoidal or periarachnoid hemorrhage from bullet or stab wound may produce complete paralysis resembling that of division of the cord. If the pressure be relieved, the patient will survive and the paralysis will be temporary.

The majority of cases of transverse or incomplete traumatic irregular paralysis following fractures recover without operative treatment, which signifies an absence of spinal cord division. Wherever there is immediate and complete circular paralysis, operation does not benefit the patient in the least, as there has been a division of spinal neurones which never regenerate.

Surgical intervention in injuries to the cord should be resorted to only in cases in which the spinal cord is not completely divided, except in the caudal zone. Immediately intervention will be of benefit when the cord is compressed above the cauda, or compressed and divided in the cauda. If operation is at all indicated, there is no reason for delay, as degenerative changes may take place in the cells and neurones of the cord, which would be as irreparable as its division.

In fractures of the spine without considerable displacement, we are justified in assuming that the cord is not suffering continued compression, regardless of the degree of paralysis; operation is contraindicated. If this paralysis is due to laceration, it will not be improved by operation. If it is due to contusion, it will recover without operation.

Immobilization is most important in favoring the repair of the spinal cord and lessening the likelihood of connective tissue and callus compressions at the site of injury.

In gunshot and stab wounds with immediate paralysis, operation is contraindicated, except in the caudal zone, as the cord is

probably severed, and its reapproximation will avail nothing.

After division or crushing of the nerves of the caudal zone, there is a positive indication for an end-to-end suture of the various fibers, the same as in peripheral nerves.

In spina bifida centralis (paraplegia in the caudal zone), resection of the atrophied portion of the cauda with end-to-end union is indicated.

Upper ependymal and true cord central spina bifida may be treated by ependymal arachnoidal drainage.

In all non-malignant tumors of the cord, laminectomy should be performed at the onset of paresis. Delay in completion of paralysis is unpardonable, not to use a more forcible expression. Operation after complete paralysis from compression with degeneration is contraindicated.

In tuberculoma compression of the spinal cord, the operation should be done at the onset of the symptoms of paralysis. Late operations, that is after pressure necrosis of the cord has taken place, are worthless.

Surgery of the spinal cord, like surgery of other parts of the body must be timely, i.e., the operation must be performed before the pathologic condition is advanced beyond the possibility of repair. In our present positive though limited knowledge, timely action means conservatism, while delay must be interpreted as timidity or inefficiency.

NOTES ON THE USE OF ERGOT.

By THOMAS C. HOLLOWAY, LEXINGTON.

The statement has been made and often repeated that the practice of medicine may be quite successfully and satisfactorily carried on by the man who has in his armamentarium not more than ten or a dozen carefully selected drugs, provided he has thoroughly mastered each of them and knows how and when to use them. Such a view is decidedly refreshing and encouraging, when we consider the present size and voluminous contents of the pharmacopæia, not to mention the large and ever-increasing number of new preparations which are clamorously demanding our attention. Indeed it cannot be seriously doubted that the intelligent use of a few simple drugs will in the end accomplish far greater good in the relief of suffering humanity than can ever result from a less skillful employment of a great variety. The practice of prescribing whatever the manufacturer recommends has been shown to be usually unsafe, besides being essentially pernicious.

By reason of its peculiar usefulness in cer-

tain conditions which are quite common the drug under consideration, almost necessarily must be included in any such list, however limited, and it therefore is important to appreciate its possibilities as well as its limitations.

In 1853 it was first demonstrated by Tulasne that the substance known as ergot is the *sclerotium of a fungus*,—the *Claviceps purpurea*, Tulasne—which infests the grain of *Secale cereale* or rye. It occurs in the form of a black, irregularly cylindrical body one or two inches in length and composed of thick walled microscopic cells containing oil-drops, but no starch. The fungus growth takes its name from its fancied resemblance to the spur of a cock and the rye thus affected is called spurred rye. It has a disagreeable fishy odor and a bitter acrid taste.

Ergot is an exceedingly complex substance as evidenced by the large number of principles which at one time or another have been isolated and shown to possess physiologically active properties, but like many other drugs of vegetable origin, its medicinal value depends upon a combination of these principles rather than any one of them.

Ergotic acid, ergotine, ergotinic acid and ergotinine; ecbolic acid and ecboline; sphacelinic acid, sphacelinotoxin, and cornutine are among the names given to principles isolated by various chemists, each claiming to have found the active principle. The most important of these as yet discovered is the resinous body sphacelotoxin, isolated by Jacobi, and probably identical with sphacelinic acid as described by Kobert. Cornutine is referred to as an alkaloid and produces powerful tetanic contractions of the uterus.

Ergotin is a term which has been applied to a great variety of substances, and to-day is most often understood to refer to Bonjean's ergotin, a watery extract of the drug which is practically the same as the official extract.

From a practical standpoint it is perhaps sufficient to know that the following preparations are recognized by the U. S. Pharmacopæia, 8th Revision:

The wine, twenty per cent., ecbolic dose one-half to two fluid ounces; the *fluid extract*, the most efficient and perhaps most generally useful, ecbolic dose one to two fluid drachms; in other conditions much larger doses may be used,—up to one ounce three times a day.

Extract of Ergot, five to seven grains by mouth. When given hypodermically five grains, in solution composed of five minims of glycerin and fifteen minims of water may be injected deeply into the muscular tissues.

Some of the manufactures furnish the extract put up in capsules, designed especially for the extemporaneous preparation of solution.

Physiological Action.—Locally the preparations of ergot produce sufficient irritation to disturb the stomach in some cases and to interfere with their use hypodermically, but beyond this little of importance is manifest. When administered internally or subcutaneously the active principles are readily absorbed, but nothing is known as to their elimination. In considering its general effects, it is observed that, its action upon the general nervous system is feeble and imperfectly understood; upon the circulation it produces as a characteristic effect a rise in blood pressure which follows as the result of contraction of the blood vessels due to stimulation of the vaso-motor centre in the medulla. It is also found that therapeutic doses cause a moderate slowing of the heart's action, while toxic doses increase the pulse rate. There is some lowering of body temperature, the cause of which is not known, and some observers have stated that ergot, especially in full doses, causes a marked increase in peristalsis.

Upon the muscular walls of the uterus ergot exerts a most pronounced influence, and upon this property its practical importance largely depends. In full therapeutic doses it so affects the centers in the lower portion of the spinal cord which preside over the muscles of the uterus, as to cause in the parturient womb, violent uterine contractions. At first the normal contractions become not only more forcible, but more frequent. The interval between pains becomes shorter and the pains become longer and stronger until finally uterine tetanus is produced.

Therapeutic Uses. In view of what has been said as to its physiological action it is not surprising to find that ergot has been used with more or less benefit in numerous and varied conditions. By far its most important use is in producing firm contraction of the uterus after the foetus has been expelled, whether at full term or prematurely, and thus controlling uterine hemorrhage. *The fact that ergot cause not only forcible, but continued contraction of the uterus affords sufficient reason for the important caution that ergot should not be given during the first and second stages of labor.* As such continued pressure seriously interferes with the utero-placental circulation, the life of the child is thus endangered, while forcible contraction of the uterus before the obstructions to the expulsion of the child have been overcome may result in serious harm to the mother. The exceptional cases in which ergot may

be given before delivery of the child are so rare as to serve only to emphasize the rule.

Dr. King in his excellent Manual of Obstetrics thus refers to the use of ergot:

On the whole it is a safe rule to abstain from giving ergot at all before the child is born, except in the retention of the after-coming head in breech presentations. Its administration in certain cases of placenta praevia is generally recommended, as well as in accidental hemorrhage from separation of a normally placed placenta; but if the child is to be saved delivery must be expedited by every possible or practical means. — The chief use of ergot in midwifery is to secure persistent uterine contraction *after* labor. It thus prevents hemorrhage and lessens the tendency to after pains. The practice which formerly obtained of using ergot to induce premature labor, when such procedure became necessary, has been abandoned in favor of more reliable and less harmful measures. In this connection it may be noted that the action of this drug upon the non-pregnant normal uterus is slight and uncertain, while its effect upon the pregnant uterus, before the beginning of labor pains is not by any means constant.

In the treatment of subinvolution of the uterus consequent upon repeated pregnancies, the exhibition of ergot in small doses for a considerable period of time is found to be of decided benefit.

By reason of its effect upon the blood supply of the uterus, ergot has been used with some success in the treatment of fibroid tumors of the uterus, but in the light of modern surgery, the cases in which this plan would be advisable are quite exceptional. Hilderbrandt, in 1872, announced beneficial results following the use of hypodermic injection of ergotin, in nine cases of fibroid tumors of the uterus. (2) The practice was extensively followed in this country and in 1886, Byford was able to collect from what he considered well-authenticated sources and including his own experience, 136 cases treated by ergot. Of these 25 were cured satisfactorily, 46 were relieved of hemorrhage and the size of the tumor not altered. (4) 27 the hemorrhagic symptom was reduced and the size of the tumor not altered. (4)

In the treatment of polyuria, ergot in full doses is recommended, the resulting benefit being due to the action of the drug in contracting the renal arterioles. (5) In like manner, ergot is ranked by Tyson next to codein in efficiency in the treatment of diabetes mellitus.

Because of this property of contracting the arterioles ergot has been employed with

more or less benefit for controlling hemorrhage. In hemoptysis, and in the hemorrhage of phthisis ergot is advised by Flint. In intestinal hemorrhage and in hemorrhages from gastric and intestinal ulcer, it has been used with benefit. Ergot has been found useful in the treatment of purpura hemorrhagica and of the troublesome hemorrhages occurring in haemophilia.

As was first suggested by Brown-Sequard ergot is still employed in the treatment of cerebral and spinal hyperemia of the insane, in acute congestive headaches, and in epilepsy its use is advocated.

In infantile spinal paralysis, Hammond states that ergot is of the greatest service and advises the administration of 10 drops of the fluid extract three times a day, for infants six months old.

In a recent paper read before the American Therapeutic Society, Osborne warmly advocates the use of ergot given hypodermically in the cardiac and circulatory failure occurring in typhoid fever, pneumonia, meningitis, operative shock and shock from injury; in tympanitis following abdominal operations, and in diabetes insipidus. He claims that by administering ergot in conjunction with morphine, in conditions requiring the latter, a much smaller quantity of the opiate will give the desired effect.

His views as to therapeutic indications for ergot are thus summarized:—

Ergot is indicated:

1. To contract blood vessels, to raise blood pressure, to stimulate the heart in conditions of shock, collapse and circulatory depression.
2. To contract the blood vessels of the brain and spinal cord, especially of the meninges when they are actually inflamed or congested.
3. To promote activity from the bowels.
4. To contract the uterus in uterine hemorrhage.
5. To ameliorate attacks of asthma due to nervous irritation or reflexes.
6. To modify excessive secretion of the thyroid gland, which occurs in hysteria and Basedow's disease.
7. To quiet the nervous system and to aid in overcoming the morphine, opium, alcohol or other drug habits and to increase the potency for any dose of morphine that may be required for nerve pain.
8. To contract the blood vessels.

REFERENCES.

1. Kolbert.—Archiv. fur. Exper. Pathol. und. Pharmakol. 1884. xviii.—316.
2. King—Manual of Obstetrics. p. 519.

3. Berliner Klinische. Wachenschrift. June 1872.
4. Pepper, System of Med. Vol. iv. p. 260.
5. Edes. Pepper, Vol. iv. p. 34.
6. Jour. Am. Med. A.—xlvii, No. 22.

OFFICIAL ANNOUNCEMENTS.

ANTITOXIN FOR THE INDIGENT.

State Board of Health of Kentucky.
Office of the Secretary.

Bowling Green, Ky., April 15, 1907.

To the County Judges, Health Officers and Boards of Health:

We are authorized by the State Board of Health to inform you that arrangements have been completed under which you may supply indigent persons suffering from, or threatened with diphtheria, with a standard antitoxin which shall always be fresh and reliable, and which can be furnished at wholesale prices. Our attorneys advise us that "in the event of the prevalence of diphtheria, in a given community, if the local board of health, a quorum being present, and regular minutes being carefully kept, duly adopt an order or regulation to furnish antitoxin for the treatment of indigent persons afflicted with such disease, or exposed thereto, the indebtedness thereby created would be a valid indebtedness of the county or city in which same was thus authorized."

It will be noted that to make use of this power to supply antitoxin at reasonable prices to your county or city for gratuitous use among the indigent, it is necessary for your Board of Health to hold a regular meeting, notifying all the members of the time and place. A quorum of the Board must be present, and your Secretary and Health Officer must keep regular minutes of such meeting. A regulation must be passed and entered and a signed copy must be forwarded to the State Board of Health at Bowling Green. Our attorneys have suggested the following rule, which has been adopted and approved by this Board, and which is hereby published and recommended to the respective county and city boards for their adoption:

Rule 67. Whenever any legally registered physician practicing in the county (city) of _____ and State of Kentucky, shall certify to the Health Officer of this jurisdiction that any indigent person in, or residing within its jurisdiction, is suffering from the contagious and infectious disease known as diphtheria, or has been exposed thereto, and is in imminent danger of contracting it, thereby endangering the health and lives of

other residents of this county (city), the Health Officer shall, with the approval of the County Judge (Mayor) provide and furnish such person or persons with diphtheria antitoxin at the expense of the county (city) of ———, in such amount as shall be deemed necessary by the Health Officer.

This rule shall take effect and be in force on and after its adoption and publication.

Approved

.....
Seey. and Health Officer.

.....
County Judge.

The State Board must be furnished with a signed copy of such order before antitoxin will be furnished.

USEFULNESS OF ANTITOXIN.

No argument is needed in favor of the use of antitoxin in the treatment of diphtheria. It is safe to say that it has reduced the average mortality from the disease by one-half. It has also greatly reduced the duration of the disease in the cases that recover, and thereby the period of quarantine during which the public is more or less endangered.

Of still greater use, probably, is the employment of antitoxin in small doses to prevent the development of diphtheria in those necessarily exposed to it.

In New York City antitoxin was used in 1043 cases of exposure and only three of these contracted diphtheria. In Chicago 7151 persons who had been exposed to diphtheria were given immunizing doses of antitoxin, and but 46 of these contracted diphtheria and none of them died.

We would strongly urge the more general use of antitoxin for the prevention of this disease as a wise public health measure. When diphtheria occurs in some poor family, living in close quarters, as so often happens, so that isolation of the sick one is impossible, the best thing to do is to at once inject each member of the household with a small dose of antitoxin. This will give them almost complete protection from the disease for some weeks.

There is little or no danger in this. Antitoxin is now made under the inspection of the national authorities, and its purity is assured.

PLAN FOR SUPPLYING AND DISTRIBUTING ANTITOXIN.

In order that boards of health may be able to secure reliable antitoxin on short notice the State Board has arranged to keep a fresh stock constantly on hand, and a supply

will be sent at once to any board of health requesting it.

Arrangements have been made with the Lederle Antitoxin Laboratories of New York City to keep the board supplied with their concentrated antitoxin, which is manufactured on the same plans as that now being used so successfully in New York City and many other places. A specially low price has been made to boards of health. It comes in single packages put up in glass syringes ready for use, and will be kept in doses of 1000, 2000, 3000, 4000 and 5000 units. The price, including the syringe, to boards of health, is:

1000 units with syringe ..	\$.75
2000 units with syringe ..	1.25
3000 units with syringe ..	1.75
4000 units with syringe ..	2.25
5000 units with syringe ..	2.75

DOSAGE.

Immunizing Dose.—1000 units.

Curative Dose.—In light cases, not involving the larynx, if treatment is given on first day of disease, 2000 units will generally be found sufficient; if treatment is not given until the second or third day of the disease it would be better to give 3000 units. If disease is severe, and in all cases of diphtheritic laryngitis, at least 4000 units should be administered, while 5000 to 10,000 units are often indicated. If favorable results do not follow within eight hours, the initial dose should be repeated or doubled. With refined and concentrated antitoxin, giving a minimum of strength in a minimum bulk, it is safer to give large doses than to risk the danger of an insufficient dosage.

The arrangements of its distribution by the State Board of Health are as follows: Upon the request of any local board of health, or of its health officer, we will at once send by mail or express, prepaid, the number of packages ordered, in the doses indicated. A statement will be sent to the person who orders the antitoxin and a duplicate statement will also be sent to the producer. The latter will collect the amount due for the antitoxin from the local board of health. The State Board of Health will not receive any money, and is simply acting as a distributing agent for the purpose of saving time.

Antitoxin will not be furnished to physicians except upon the order of the local board of health.

It may happen that an outbreak of diphtheria will occur where many persons have been slightly exposed, as in school, for example. The board of health may wish to have a small supply of antitoxin on hand for such an emergency, but may not be call-

ed upon to make use of it. To meet such conditions a board of health may order as many as 20 immunizing doses and 10 curative doses, and have the privilege of returning to the State Board of Health within 30 days any unopened packages for which it will receive credit. The only extra expense, where this is done, will be the postage or expressage upon the packages returned.

In ordering antitoxin care should be taken to explicitly state the number of packages wanted and of what doses. The post office, or express office, if a large quantity is ordered, to which it is to be sent, must also be given. When antitoxin is received it should be kept in an ice chest, where possible, until needed.

It should be remembered that the success of antitoxin in the treatment of diphtheria depends largely upon its early use in sufficiently large doses.

Each package of antitoxin will contain a blank report of the case in which it is used. Physicians who receive antitoxin from boards of health will be required to fill out this blank and return it to the State Board of Health. They must also certify that the antitoxin was used for a person in indigent circumstances.

Local boards of health are urged to make use of their authority and this arrangement for supplying antitoxin for the cure and prevention of diphtheria. Physicians are frequently called to cases of diphtheria in poor families where the use of antitoxin would mean the saving of life, but where the family is too poor to purchase it. The physician should not be expected to furnish it at his expense. This should be borne by the public for the reason that to lessen the number of deaths from this disease, and the period of time during which those who recover must be quarantined, and also to protect those who are exposed from having the disease, is a public health measure for which the public can well afford to pay.

By order of the Board.

J. M. MATHEWS, President.

J. N. M'CORMACK, Secretary.

To the Members of the Kentucky State Medical Association:

As Chairman of the Committee on Scientific Medicine I salute you!

This beautiful, balmy morning reminds us that spring is here, that summer is coming, to be quickly followed by autumn, the season of the year in which the doctors of this Commonwealth are more particularly interested, for it is then there will be a gathering together of the clans, which means a social

as well as a scientific reunion. You know that the Kentucky State Medical Association will hold its next annual meeting in Louisville, October 15, 16 and 17. You understand, too, that Nature is fruitful in resources and is not slow to begin the process of repair if given an opportunity; the same "spiel" may apply to each of you. You are fruitful, now is your opportunity. It is high time to begin the preparation of the program for the forthcoming session. Your ability combined with enthusiasm would make the 52nd "annual" a success beyond any of its predecessors. The work your Association has done, and is now doing, compares favorably with that of any other state organization—this Association is the profession of Kentucky, representing pure democracy in medicine and aristocracy in professional labors. It depends upon you to furnish the sinews of science for the meeting to be held in the city of Louisville next October to make it a blooming success both scientifically and socially.

I am very truly yours, etc.,

STEELE BAILEY.

Stanford, May 13, 1907.

[The Committee on Scientific Work extends the above invitation to members of the Association to prepare original articles for the Annual Session which will be held in Louisville, October 15, 16, and 17. The program will be arranged in June and members desiring to prepare articles should write at once.—Ed.]

ORIGINAL ARTICLES.

IDEAL RELATION BETWEEN THE DOCTOR AND THE PEOPLE.

By W. W. RICHMOND, CLINTON.

A great writer has said, "In giving thought to the public, one should contribute something of himself." Thus, a composer should give a musical composition; an artist, a picture; a poet, verses; and an author, a book, etc. Acting upon this suggestion, I will write what I have to say upon the Ideal Relation Between the Doctor and the People, and I want to say that I hold my people in the highest esteem.

I am by no means an individualist, and sometimes think if I were a Russian, I would have, long ago, been dealt with for communism. I believe in the right and power of the people. All that is needed to bring about a hearty co-operation between our profession and the people is truth, and this should not be hard to find. Shakespeare has well said,

"To thine own self be true, and it follows, as the night the day, thou canst not be false to any one."

Now as to this relation, any two factors, composing a combination or a party, immediately projects the idea of the claims of consideration and obligation upon the part of each toward the other. Let us consider that which concerns the physician.

The origin of things always arouses something of wonder and reverence. We say of a man, Who is he? Whence did he come? What has he done? What is he now doing, and what are the results of his work?

The force of character is cumulative. All the virtues of by-gone ages find expression in the present. What silent but mighty influences have made the heroes of the past? The consciousness of a train of great days and mighty victories won. Their deeds shed a light upon the coming actors, and herein lies the pride, which we, as descendants of our English forefathers, feel in ancient and honorable origin.

It was under the genial skies and Classic shades of Greece that the history of medicine had its beginning, and from those days all along down the centuries to the present time, the physician, in his efforts to unravel the hidden mysteries of his science, has been restless and unrelenting. And though his efforts, at times, have seemed fruitless, and the results barely perceptible, they have accumulated until, to-day, they challenge the wonder and admiration of the world. This is evidenced by the rapid strides that every department of medicine and surgery has made in the last half of a century.

It was through the efforts and faithful perseverance of a doctor, the immortal Jenner, that we are, to-day, rendered immune from the dreadful scourge, smallpox, which in the past has swept the land with horror and death, and counted its victims by the thousands. Through the science of inoculation, performed by the art of vaccination, smallpox has so far lost its terrors as to be termed by the people, "Cuban Itch."

It was a patient, laborious physician, who discovered chloroform, by the application of which is removed the terror and pain of the surgeon's knife. It was a physician, who has discovered, in more recent years, the germs, or bacteria, of yellow fever, of cholera, of diphtheria, of scarlet fever, of malaria, and consumption, together with their mode of transmission and manner of treatment and prevention.

To these discoveries, we may attribute our great national, state and municipal quarantines, which are established and directed by

the medical profession, and which have driven some of these diseases from our land, and so greatly modified the virulence of others, that people no longer live in dread of them.

This process of quarantine is brought, by the physician, very close to us, even into our communities and our homes. We see the family physician place the flag of warning at the door of the infected home, thus protecting the people from the enemy within. He does not stop at this, but demands a domestic quarantine by separating the sick from the well members of the family. He is not unmindful of the fact that by coming from the sick room and mingling with the people, he may himself convey the germs of the disease on his own person, and so spread it to others and to his own family. Therefore it is careful to apply the process of disinfection to his own person that the danger of contagion may be averted to all except himself. Hence the only sacrifice in the whole transaction is the doctor himself. Having by the process of quarantine and isolation brought the enemy to bay, armed with the remedies of science, his first effort is to rescue the patient, and his next to exterminate the enemy, which he does by the process of fumigation. Thus the physician, aided by the discoveries of his profession, is able to cope with, to mitigate and often render nugatory the scourges of the most malignant diseases.

The physician should not allow himself to become discouraged if, as is sometimes the case, he finds his efforts and his sacrifices unappreciated, and his endeavors for the health and welfare of the community misunderstood, and his character maligned. Such adverse criticism, for the most part, comes from the ignorant, vicious, jealous and malignant, and in the long run, will redound to the advantage rather than to the injury of the doctor, who pursues his duty, guided by an enlightened conscience, and unperturbed by either misconception or the foul voice of slander. On the contrary, let him be encouraged by the assurance that in all communities the thoughtful, the upright and the just and in short all those, whose opinions are worth having, will sooner or later appreciate his worth, and mete him due honor and reward.

Again, the profession of medicine, as that of law, of teaching or of preaching, has its quacks. As many of the uninformed, adjudge a lawyer's greatness by the theatrical gestures of his body, or the preacher's ability by the volume of voice he may flame into his sermon, so they judge the quack, or unskilled

physician, by the amount of advertisement he gives himself, in one way and another, out of the ordinary of the regular physician, while they are utterly unmindful of the true physician, who quietly and busily pursues his practice, or prepares himself for future emergency by hard study and close investigation in his office. Perhaps there is no profession, in which the client, by a lack of discrimination, suffers to a greater extent, than he, who is unable to distinguish the quack, or indolent doctor from the painstaking and skillful physician. The incompetent lawyer may lead his client to sacrifice his worldly possessions. The unskilled teacher may destroy the power of the child mind for future, correct thinking, but the unskilled doctor may often destroy the health and even the life of the patient. In many instances, the incompetent doctor will succeed, if not too lavish with his drugs,—for nature, often by her own force, is able to expel the complaint, and recuperate the health of the body, but there comes a time when the first symptoms of the malady takes its course straight for the grave, then it is that the incompetent doctor stands in the way instead of a help, and thereby becomes an auxiliary to the disease and hurries the patient on to his fatal destiny;—when the skilled physician, in the same case, would recognize the symptoms, and by proper and timely treatment lead the patient into the green pastures of a long and healthful life, upon which old age and the shadow of death steal as quietly and as painlessly as the noiseless darkness of a quiet night creeps upon the balmy light of a perfect day in June. But I am proud to say that we have few quack doctors in South Western Kentucky, and under our present law, governing the practice of medicine, the time will soon come when we will have none.

It is the duty of the physician to the people to keep himself well informed upon all current questions, and especially upon all questions pertaining to his profession. For this reason he should have a clean and well kept office, well supplied with the latest books and journals, not only medical books, but he should have some books of history and literature, and of the arts and sciences. He should possess such knowledge as will mark him as a man of intelligence, and so arrest the respect and consideration of the thoughtful people of his community.

The physician owes it to his profession to give freely of his time and money to all legitimate organizations, formed within his profession; and he should feel it an obligation to take part in the meetings of such organizations, that he may not only learn from others

but that he may also impart to his younger and less experienced brothers the fruits of his knowledge and experience. This applies especially to his County Medical Society. He should take part in the organization and maintenance of his County Medical Society, and thereby aid in the establishment of a genial and harmonious medical profession.

He should use every honorable means in his power, by generous rivalry, to inspire his brother to higher and nobler efforts, and in that way impel him to develop his powers and skill, and advance his interests to the highest possible point of attainment, rather than by insinuation and misrepresentation, slander and hypocrisy, and other dark and devious methods, try to overthrow his competitor, and stand upon the wreck and ruin of his downfall. He should rise above the common level of the quack or charlatan, and stand upon the honor and dignity of his high calling. Let men seek him on account of his worth and ability, rather than run after men for patronage. In that way he will help to place the medical profession upon the high plane, where it belongs and where it so justly deserves to be. And the people will no longer deride the profession, or impugn its motives, but will honor and respect it, look up to it, trust it, and obey it as a means of health and long life.

The physician, like the laborer, is worthy of his hire. He is not only entitled to the respect and consideration of the community, but he is also entitled to a pecuniary reward commensurate with his fidelity and skill. Every doctor places a value upon his services. This value should be proportionate to his mastery of his calling, and though it often happens in his profession, as in other professions, that the laborious, well equipped doctor receives but scant pay for his services, while the monte-bank, through his power to deceive the people, revels in his pecuniary success; yet, this is but an exception to the rule, and the young practitioner may be assured that in the course of time, his energy and fidelity will be rewarded by a sufficient competency from the field of his labor.

On the other hand, it will be of advantage to the health and happiness of the people to give ear to the doctor's advice, and to accept and support his suggestions, knowing that his motives cannot be mercenary, but unselfish and for the good of the community. The doctors' relation to the home is more sacred than that of the minister of the gospel. The minister enters at the front door, and seldom sees farther than the parlor, usually when expected. While the physician often comes hurriedly, when the family is distracted by some accident, or emergency, and he sees the

home at its worst. He must often explore and without sufficient warning, not only the kitchen but the most unsightly places of the home. The momentous conditions, etc., of operations, no one ever knows but the physician and if he be true to his calling, he will keep such conditions sacredly within his own bosom.

Finally let both the physician and the people subscribe to Longfellow's observation, "We lead but one life here on earth, let us make that life beautiful." No man lives unto himself. To make life beautiful, each and especially the physician, must live to aid, to encourage and comfort his brother. Let him follow and practice the precepts of the Great Physician, "Who spake as never man spake," and taught as never physician taught, namely, —a new commandment: "I give unto you, that ye love one another," and adopt as His motto the Golden Text, "Whatsoever ye would that men should do to you, do ye even so to them." With these principles foremost in the mind and heart of every physician, the profession would be more strongly bound together, command a greater respect and gain a stronger hold upon the love and confidence of manhind.

Life, to the doctor, would be worth living and the people would rise up and call him great.

Every true man has his calling, his objective point in life, and his body is but a frail bark upon the boundless sea of existence. His will and his energies are the forces that urge on, and his conscience the pilot that directs the bark. Clouds may gather, the storms may break, winter's wind may strike, and ocean waves may beat upon his bark, but if he has faith in God and himself and love for his fellowman, he will surely and safely reach his goal.

"Sunset and evening star,
And one clear call for me,
May there be no mourning at the bar
When I set out to sea."

CEREBRAL CONGESTION.*

By JESSE T. SMITH, GAMALIEL.

From what I have seen and heard of man relative to this subject I conclude that he has been the proud possessor of a cerebrum from the most primitive to the present state of his intellectual development. Nor has this pilot house of his been without the cleansing element (blood) to keep it swept and garnished.

The subject of this paper suggests that there is a physiological relation between the

brain and the blood, by referring to a pathological state, congestion or hyperæmia. So long as this physiological relation exists this bark is guided over life's tempestuous sea in nature's own channel or current, but when this condition changes the ship is at sea without a rudder and is often stranded. Then comes the pilot (the doctor) with his tug boat pills and plaster, to tow her safe into harbor; but alas how often does the shattered craft go into dry dock from whence it never returns.

We know something of the results of a physiological brain from our daily contact with man in his several relations and conditions.

As to the pathological changes that exist in disease of the brain I know very little, for I have had the pleasure of very few autopsies and if by chance one should come my way, I could not tell whether the condition found was the result or the cause of death, and more especially in cerebral congestion.

It seems to me in considering cerebral congestion we reason from effect to cause, therefore it is with doubt, fear and foreboding that I approach the subject. There is one thing that is evident and it is that too much blood in the brain produces hyperæmia or congestion.

Cerebral congestion is an increase in the amount of blood in the capillaries of the brain. The construction of the head and its relation to the brain is such that neither the arteries nor veins of the brain substance can be ever distended without capillary hyperæmia; and since it is to capillary congestion that the functional disturbance is related we at once conclude that this is the essential pathological element in cerebral congestion.

Cerebral congestion is either active or passive, it is active when the capillaries are distended with oxygenated blood rapidly passing through in consequence of arterial distention.

Cerebral congestion is passive when from venous obstruction the capillaries contain slowly moving blood becoming more and more venous.

As predisposing causes we might say that males are more liable than females, adults more than children and fat people more than lean ones. As to general causes there are a great many, the following being a part thereof: Blood pressure from excessive action of the heart, contraction of the surface capillaries during a chill, prolonged mental labor, intense emotion, digestive disturbances, acute blood poisoning, increased atmospheric pressure, gravitation from prolonged recumbent posture, local anemia in other parts of the body, intense muscular exertion, pressure of

*Read before the Monroe County Medical Society, April 4, 1907.

tumors and dropsical fluids, severe nerve shock, paralysis of the vasomotor nerves, poison from some drugs such as alcohol and nitrate of amyl, etc.

Passive congestion of the brain when general is the result of impeded return of blood from the head as the result of pressure upon the jugular or vena cava. Tricuspid regurgitation stands pre-eminent in the causative list, it sometimes occurs from feebleness of the incoming flow.

Partial passive congestion of the brain is caused by a thrombus in a cerebral vein or by pressure from a growth in one of the cerebral sinuses.

The capillaries of the brain are not visible to the naked eye even when over distended, but the microscope shows them to be distended to twice their normal caliber, sometimes, these conditions are indicated by fullness of the small arteries and veins and a deep color of the gray substance.

This condition of the veins and arteries are always found after death from interference with respiration the most dependent being the fullest.

Owing to the fact that we have so many contributing causes and so many types of cerebral congestion it is difficult to keep from confounding it with other diseases of the brain.

It is claimed by Mr. Moxon, that cerebral congestion never causes any symptoms except in death from strangulation.

I am not prepared to accept this statement, for when we remember the different types of this disease and the pathological changes in the brain, reason teaches us to expect symptoms to accompany these changes.

The symptoms commonly referred to cerebral congestion are those of excitement and depression, they may partially coexist or they may exist alone; those of excitement usually precede those of depression.

They may be acute or chronic, slight or severe, in all cases they are increased by recumbent posture, depressing the head, constipation and alcoholic poisoning, by forced expiration and exertion.

In general hyperæmia there is generally found slight headache, mental inability with a throbbing full sensation in the head accompanied with vertiginous or other unpleasant sensations with reverse, perverted or increase of the special senses.

Among the symptoms of depression may be mentioned dullness of the special senses, motor weakness, wakefulness and mental indifference.

In the acute type there may be a special form of the attack.

The convulsive form is preceded by pain or uneasiness in the head followed by muscular spasms with or without the loss of consciousness.

The delirious form is often seen in two aspects, first, in old age after emotional exercises and mostly related to the recumbent position; second, following excitement and alcoholic poisoning. The apoplectic form is marked by a sudden loss of consciousness occurring commonly during effort, this may last only a few seconds or it may deepen into coma and death.

Partial hyperæmia leads to local symptoms of excitement or depression and if they are not complicated that soon subside.

In accounting for the symptoms of excitement and depression we only have to remember that an excessive supply of arterial blood in any organ is accompanied by functional activity, and an excessive supply of venous blood is accompanied with functional depression, so it is with the brain. Compression of the brain by effused serum and the reaction of excitement, pressure from distended blood vessels, imperfect oxygenation of the nerve fibers and the presence of effete material all taken together gives a predominance of depressive symptoms. Thus it may be seen that congestion may itself produce anaemia so far as nutrition is concerned.

The diseases for which cerebral congestion may be mistaken are, apoplexy, embolism, uraemia, active alcoholism, epilepsy and cerebral anemia.

In cerebral hemorrhage the onset is very sudden, the coma is prolonged and always accompanied by hemiplegia and aphasia.

In cerebral embolism the onset is sudden, the face pale, head cool, pulse and respiration rapid and irregular.

In epilepsy there is always an aura, the patient falls as from a blow uttering the telltale cry, muscular contractions are first tonic then clonic with bloody froth around the mouth.

In uremia the coma is deep with swelling of the eye lids and lower extremities and a rat nest odor to the breath.

In cerebral anemia the headache is vertical and the pupils dilated, in congestion, the pupils are contracted and the headache is diffused, anemia incapacitates for mental work, congestion, hallucination and loss of memory, in hyperæmia the respiration is hurried, the pulse is quick, a feeble heart murmur with cool head.

Before closing this paper I desire to say a few words relative to treatment. The first step in the treatment is to remove the cause if possible and those things which tend to pro-

duce the disease.

Then let us begin by keeping our patient absolutely quiet and in bed with the head elevated and prohibit the use of alcohol, giving diet of the most easily digested form and in small quantities at short intervals. In active congestion cold to the head and heat to the feet with a brisk purge of calomel.

When cerebral congestion is caused by the cessation of the menses or old hemorrhoidal flux use hot sitz baths, emmenagogues or leeches to the anus. When practical, a change of residence and rest from mental worry often gives good results.

In active congestion I believe blood-letting would be beneficial if the blood was taken away rapidly.

As to the medication the first thing is calomel, the bromides are useful in most cases, some recommend zinc with the bromides, ergot and antimony have been used in active hyperaemia.

In passive congestion stimulants with the bromide of soda or potash may be given, digitalis is usually indicated, quinine should be given in coma due to cerebral hyperaemia, give it in small doses at short intervals. Other drugs are mentioned, but a good rule in the treatment of the disease is treat the indications.

Sulphate of magnesia might give benefit in active congestion.

INSANITY.*

By J. M. FERGUSON, HOPKINSVILLE.

The subject upon which I have written is one of the broadest that could have possibly been selected, but I shall only endeavor to bring to your notice some general facts which may be interesting in some degree. There has never been a time when there was being so much said and written in regard to insane, and never a time when expert testimony was so in demand.

When we begin to draw a line between the sane and the insane then it is we discover that the difference is so slight. To the doctor no matter whether he be practicing in a city, town, or rural district this is a very important subject, for so often is he called upon to diagnose and treat some form of this disease. Of course he is not expected to be an expert, nor to be familiar with insanity in all its various forms; one should at least in a general way be able to recognize the real from the imaginary pain in order to intelligently diagnose and treat the

case. It is true, however, that you can treat the physical condition more accurately without knowing the mental than you can treat the mental condition without knowledge of the physical. You can improve the body frequently without the least improvement of the mind, yet you can scarcely ever improve the mind without the body. Still, the physical is so closely related to the psychical that they are considered by some as a unit. It has been said that all forms of insanity have a common basis, and their apparent diversity is dependent upon inherent physical condition resulting in instability or defect, which operate to determine a definite sequence in their manifestation, in accordance with the condition in the environments of the individual affected. It has been said that there is no abstract difference between the conduct of the sane and the insane. The difference lies in the relation of the activities involved to the environment and the degree of control of the activity manifested in conduct—that is to say, we are dealing with alterations, not destruction of functions. In the one case action is governed by external stimuli, the effect of which is habitual, while the other they are excited by centrifugally generated stimuli, more or less out of accord with external conditions. Mental aberrations may occur without much or any loss of mental capacity. There is great difference between insanity and dementia. Insanity only becomes apparent when the individual is no longer able to control the activities manifested in conduct. The loss of control may be temporarily brought about by anger, pain, intoxication or disease—in fact, in any ordinary relation of life we judge one's sanity by his power of self control. So many individuals are normally deficient in this kind of mental capacity, and it might be said that to this class belong those who commit crimes of violence and brutality, or develop a craving of alcohol or narcotics. There is not one of you here to-day who have not been called upon to treat mental aberration in some of its forms resulting from social or business strain, grief, or anything that has held their mind on a single subject for a definite period. These are the unstable individuals who suffer periods of exultation and depression, who have not sufficient self control.

Those who live with the insane soon learn to note the absence of the clinical syndrome called "forms of insanity," for in the newer day, to-morrow is depressed and vicious, reading the Bible to-day, to-morrow cursing constantly, at other times he is nervous and wandering around anxiously looking for

*Read before the Christian County Medical Society April, 1907.

something perhaps with which to do himself harm or those around him, presenting to us a very miserable picture.

Of all the different diseases to which the human race is heir there is none so dreaded and so far reaching as is insanity. It is rightfully described as a "living death," for there is no other disease which becomes so alarming to both relatives and patients. It makes the most happy homes the most miserable, and the happiest person is changed to the most discontented; yet, when we consider that one is taken from his family and home to be confined perhaps in an institution with hundreds afflicted with the same disease and where he is constantly seeing distress and sorrow about him, also being detained against his will, having been deprived of all social, financial, civil, political and domestic privileges, then we begin to appreciate more fully the horror of insanity. When we begin our search for the cause then we find as in many other forms of disease that we have a very difficult task. In a majority of cases the diagnosis is made by information gathered from friends or relatives being some antecedent in the history of the patient, which seems to bear the most immediate relation to the attack.

Underlying the causes ascertained there may be many, which were or might have been conducive to the present attack, such as acquired or inherited frailty of the brain tissue, inherited instability of the general nervous system, alcohol, tuberculosis, and syphilis, and of all of these in my opinion, judging from the short experience I have had, tuberculosis plays the greatest part. Alcohol and syphilis certainly play their part in the causation of insanity, yet I think quite a number of people are insane who have never been addicted to alcohol, nor who have tuberculosis or syphilis, and to these we might add the "drug habit," for it certainly does its part in producing insanity.

As I have indicated, any of these causes separately may and do lessen the mental capacity, yet so frequently we have some of them occurring together—that is the frail brain tissue may become the seat of a tubercle or of a gumma. The person with the unstable nervous system falls an easy prey to alcohol or to the drug habit, possibly may develop chorea or epilepsy, all of these certainly dependent upon the environment of the individual and his capacity to combat with the crucial moments as he is confronted.

We so often find tuberculosis developing in an insane person when their physical condition has heretofore seemed unimpaired, but upon investigating their history we find

where quite a number of their family both remote and immediate have died with consumption. The tubercular bacillus may have been working slowly but surely on the brain and nervous system for months or even years, but with the power of resistance furnished some individuals the only perceptible effect has been the dethroning of reason. Who has not noticed the unsound reasoning of his consumptive patient? Their belief in certain recoveries, their unfailing interest in business and surroundings, their attribution of a harassing cough to bronchial disorders, their overanxiety to do something for themselves by changing doctors and the use of any and all kinds of patent medicines. These are the cases we see in our daily practice, while the worst forms are cared for in private sanitariums and public institutions, where they are found to be some excited and extremely restless and nervous, while others are melancholy and listless, depending upon the individual effected. They seldom become violent and their delusions are seldom ever of a persecutory nature.

Differing from the tubercular patient, is the syphilitic, whose peculiarities are first manifested to his home people by becoming cross and spiteful, losing the power to concentrate his mind, but scheming continuously first on one thing, then in only a few days trying another, generally blaming some innocent person for his failure to accomplish his desire, is extravagant, wasteful and boastful, finally ending by trying to kill or injure some one when he is taken in charge by the court and finally sent to the penitentiary or some institution for the insane, where he dies, and most usually with convulsions.

It is hard to estimate to what extent alcohol does take part in the cause of insanity, both directly and indirectly, but suffice it to say that statistics from some institutions have shown that alcohol was the cause, either exciting or predisposing, of 17 per cent. of the number admitted. Alcohol seems to have a special affinity for the nervous system, although other organs suffer as well, for it often causes death by disease of the great glands of the system—that is, the liver and the kidney. Now, just what part of the body will be effected depends upon the family tendencies of the individual, for it will surely attack the place of least resistance. We notice the effect of alcohol on different individuals: one under the influence of the same amount of alcohol will become jolly and even foolish, while another will be aggressive and noisy, when the third is only noticeable by his unsteady gait due to the loss of muscular control. Alcohol brings about other forms of

indulgence by unbridling inhibition and quite a number of these cases progress into fatal insanity, called "general paresis" where they end their days in an asylum. All this the primary results of deficient self-control, and a weakness which causes them to yield to temptation.

As to heredity, no matter what view may be accepted as to its transmissibility, we do know that intemperance retards growth and weakens character; also that children of alcoholic parents are most generally feeble, aside from the neglect to which they have been subjected; also the children of drunkards are more prone to all forms of mental diseases, such as epilepsy, chorea and hysteria, and that the more degenerate forms, such as idiozy, imbecility and dementia frequently occur. We also know that heredity is a very important subject to be considered in regard to the offspring of tubercular and syphilitic patients, and we all admit that they inherit a tendency or predisposition to the three diseases mentioned.

NELSON COUNTY MEDICAL SOCIETY IN RELATION TO HYGIENE.

BY W. LUCIEN HEIZER, NEW HAVEN.

We recently had the pleasure of listening to an able paper by Dr. Knott, at the Marion county meeting entitled, "The Doctor as a Philanthropist," in which the point was emphasized that the doctor is the only one of the many in professional and business life who knowingly, willingly and cheerfully gives *gratis* information and advice to the people, saving them immense sums of money in doctors' bills, and which, by so doing, deprives the doctors of that sum which properly belongs to them. And so it is, yet there are none of us who would withhold this counsel from the people, but instead we are anxious to do all in our power in baffling disease, to prevent its spread and protect the helpless in calamity.

Our duties as doctors and as a medical society may be conveniently embraced in about three groups, the first of which is the prevention of disease.

Too much work cannot be done by us in the way of preventing typhoid fever and the like diseases. We all know that this is preventable disease. It is our duty to let the laity know that this is a preventable disease. We ought to teach them the details of its prevention; that the use of ice gathered off filthy ponds is a potent means of infection, the freezing temperature of the ice not being sufficient to destroy the typhoid bacillus; that infection takes place, and takes place only by

the introduction of germs into the mouth, and that the faecal matter and urine contain myriads of typhoid fever germs which are carried to our food by means of the common house fly, or by other preventable means; that effectual screening of doors and windows, and proper disinfection and disposal of the excretions, bed clothing, etc., is one of the surest means of preventing the spread of this dread disease.

All of these facts and many more should be enforced upon the minds of the people, and it is safe to say that they are anxious to have this information imparted to them.

These methods in England, Wales, Scotland, Germany, Sweden, and Norway, have reduced the deaths to 10 in 100,000 of population, while in the United States the rate is 35 to 100,000 population.

Improved sanitation, pure water, ice and milk supplies in cities and towns and rural districts, and improved sanitary toilet rooms on our railroad trains, which are undoubtedly important factors in the distribution of typhoid fever germs would reduce this death rate of 35 to 100,000 population to one approaching that of the above named countries. It rests with the individual doctor as a part of the county medical society, which is a factor of the state and national medical societies to do his share and our share in perfecting this crusade.

The facts in regard to malaria when presented in plain English to the people make interesting reading. They are entertained to know that the mosquito of a certain species, hatched from "wiggle-tails" in rain-barrels, marshy places, etc., flying mostly at night, is the commonest dispenser of chills and fever and the various malarial infections; that the pouring of a little oil in troubled waters would block the mouths of their bronchial tubes when they rise to the surface to breathe and effectually drown them, thus checking the spread of the disease. They are surprised that the common bedbug may infect them with malaria, and that a thorough fumigation with formaldehyde would put a quietus on his proceedings. Only recently I mentioned to the owner of a farm that a tenant house of his had in the walls a supply of bedbugs that had undoubtedly given typical intermittent malaria to two different newborn infants in families who had never had malaria and who could not have been infected by mosquitos as they had moved there in the winter. He was interested at once and told me he had trouble in keeping tenants there as they left saying it was damp, water was bad, and they would have chills. He asked what to do about it and when told a

remedy said he would have it done at once. This shows that if this society will get before the people the facts in plain, every-day English they will grasp at opportunities to better their conditions.

Advice concerning all the acute infectious diseases can be administered along the same lines with good results.

Our duty lies especially in the prevention of tuberculosis. The time is ripe for popular education on this subject. We know it can be prevented absolutely and that in the early stage it can be cured with certainty. But how few are the cases we ever prevent and how few we ever cure, and why? People do not give us their co-operation through ignorance of the nature of the disease or they distrust our diagnosis in the earliest stages of the disease. They ought to know that the disease may exist in the healthiest looking man, woman or child; that a bad cold may not be a bad cold; that bronchitis may not be more than a bronchitis, and a hoarseness may be more than a congestion of the mucous membrane of the larynx, but a tubercular ulcer. They ought to know that drugs are almost valueless in the effort to destroy germs; that a drug to destroy the protoplasm of the germ would in all probability destroy the protoplasm of a living cell in their body; that consumption is not inherited, but acquired; that it can be transmitted by one person to another, that that is the reason several in one family have it. They are careless, or ignorant or both and deliberately transplant from the breath or saliva of one person to the air passages and lungs of another. They ought to know that marriage between tubercular subjects and non-tubercular subjects can only bring grief, woe, disease and distress. They ought to know that their doctor can prevent them having tuberculosis; can cure them if they come early. These and many other things the public ought to know concerning tuberculosis.

It is our duty to eradicate the false beliefs as to the causes of diseases, as to the cures of diseases and as to doctors. How many times we do hear that "worms" are troubling baby or that it is "teething" when we find, upon investigation, that they are feeding it candy, preserves, hot soft biscuit, cabbage, green apples and a host of material absolutely indigestible to a youngster of that age, or worse still, straight cows' milk after weaning? We hear of the lying-in woman putting her feet to the floor and contracting child-bed fever, while at that moment to catch the lochia are placed some of the oldest and dirtiest rags on the place. We see the amber beads strung around the neck to pre-

vent sore throat or a big bunch of asafoetida to ward off contagious diseases. We come in contact every day with the lard and turpentine fiends who employ these agents in the most unheard-of therapeutic fashion. We see sometimes the criminally careless or ignorant. I recently lost a case of diphtheria from paralysis of the heart who had been ill eleven days before calling in a physician, and who was the last of a family of four to have the disease which had been diagnosed by them throughout as a deep cold and tonsillitis. We hear of "bad water" and "night air," "damp houses," as causes for malaria. We see people with tuberculosis called "weakly" sleep with innocent freedom with various persons. We know that men who have been warned by his doctor will take unto himself a bride, a pure innocent girl, thus giving the lie to his medical adviser, only to find himself the father of tainted children and the husband of an infected wife.

It is time for the physicians in this and every other county to forget their foolish antagonism to one another, get together and enlighten the people, warn them of dangers of which they are blissfully ignorant, and brave their attacks that all the advice we give must rebound to our pecuniary benefit. We can, by so doing, increase the confidence the people have in us, eradicate false beliefs they now hold, and advance our profession to the extent that the membership therein shall constitute a great honor.

The third of our aims should be the prevention of drug habits, either of drugs self-administered, or given by the physician. Much, but not too much has recently been written in regard to the nostrum evil, and it is here that the laity usually accuses the doctor of selfish interests. These charges will become lost in the good that physicians do if they do their duty in this regard. Only recently I had a case of acetanilid poison from the use of Kennedy's headache tablets, the patient becoming blue from head to foot, extremely weak, pulse rapid and feeble, tongue dry and extremities cold and clammy. Under appropriate treatment she recovered.

Mr. Bok, editor of the Ladies' Home Journal, recently read a paper before a medical society in Philadelphia, in which he made some statements of facts that the profession may well be ashamed of. He examined the prescription files of several drug stores and found that a large per cent. of these prescriptions written by doctors called for proprietary medicine, and upon visiting the doctors who wrote them, fully 75 per cent. were unable to tell the ingredients of the medicine

prescribed. How much more foolish is it for the laity to believe the astounding (?) statements of the makers relative to the efficacy of the drug, than for the doctors to believe the literature and statements of detail men sent out by makers of drugs we prescribe? It is not our aim to take up in this paper the duty of the doctor in prescribing these proprietaries only so far as they contain drugs affecting the public health, but in passing it may be well to say that no doctor worthy of the name will dare give his patient, suffering with a certain disease, a drug or combination of drugs, of the nature of which he is ignorant to cure that disease.

Perhaps one of the greatest sources from which the laity get false ideas of themselves and diseases is the inexhaustible supply of free advice and information administered by nostrum venders. Here is a sample:

"Have you a weak back?"

"Pain in the back of morning?"

"It is one of the surest signs of kidney disease?"

Here is another:

"Collect your urine at night, if it shows a brownish sediment it shows positively a kidney disease or beginning Bright's disease and you should at once send for a bottle of so and so."

When probably all they need is calomel followed by salts and regulation of diet and exercise.

Here is another I read which was sent to a bride of a few days and given me by her husband:

"You are young in married life and doubtless do not desire to be burdened just yet with a family. So and So's pills will safely bring about regular menstruation and positively will not harm you in any way. Your reply will be strictly confidential and the medicine mailed in perfectly plain envelope, etc."

And so they prey upon the young and old, the healthy and afflicted, giving them garbled truths and lies, fiction and facts, made into any kind of hash for the purpose of exacting money for a usually worthless medicine drawn from the same cask for any and nameless diseases, and which creates a drug habit in the user that to satisfy it he is compelled to spend and pay until death relieves him, poverty stops him or an awakened conscience reclaims him. Shall we as a county medical society do nothing while thousands of dollars from this county, from people least able to spend it, go to fill the coffers of these disreputable "doctors," while hundreds of our clientele are buying bitters for their stomach's sake, opium in soothing syrups and

cough syrups for their baby's sake, acetanilid and depressants for their heart's sake?

Our solutions for these conditions lie in three directions leading to one—education of the public. The most effectual way, but limited in application is the advice of the doctor as an individual to his patients in every day practice. This procedure by every doctor in the county will accomplish a vast amount of good. A committee termed "Committee of the County Medical Society on Public Hygiene," whose duty would be to prepare a half column article for the county newspaper written in an entertaining style, containing scientific facts concerning the prevention of diseases, the cause of diseases, the false beliefs of disease, the dangers of drugs when not understood, would accomplish a great deal. In summer, "children's complaints," would require three or four weeks to cover. Colds, bronchitis, La Grippe, etc., at the proper time, typhoid fever, tuberculosis, the acute infectious diseases, malaria, all could be handled in a style to please and entertain, and at the same time let the people know that these are facts they are getting and not false doctrines to beguile them of their means, but written to protect them and their children and neighbors against disease. This committee need not be known to the public and all matter to be signed by the committee on Public Hygiene, of that county.

Another plan is by popular lectures to lay audiences. Invite one of your professor friends out to lecture on one of the above-named subjects in its relation to hygiene. Each year the county medical society should be represented one day at the county teacher's institute, and lectures along the above lines given to the teachers of our children.

To summarize we would say that the county medical society is in relation to Public Hygiene in the following particulars:

First, as to the prevention of diseases, mainly the acute infectious diseases, typhoid fever, malaria, and tuberculosis.

Second, the eradication of false beliefs as to causes of diseases as set forth by folklore and patent medicine frauds; as to cures of diseases and as to doctors.

Third, the prevention of drug habits through patent medicines, the nature of which they are ignorant, and through the carelessness of the physician in administering and prescribing drugs producing habitues.

Fourth, the solution of these problems by means of the doctor's individual efforts as practiced by all the doctors of the society: through the press and by means of popular

lectures to lay audiences and teachers' meetings.

A PLEA FOR THE MORE FAITHFUL CONSIDERATION OF THE NATURAL HISTORY OF DISEASE.

BY JAMES B. BULLITT, LOUISVILLE.*

A proper understanding of the natural form and functions of the body, of anatomy and physiology in other words, is emphasized by teachers and universally accepted as the sound and true basis of a rational medical education. The changes in form and function which constitute disease, pathology, are never safely recognizable unless the observer has in his mind's eye the normal conditions which constitute health.

While this is preaching for the freshman student from day to day, it becomes a recognized gospel for the matured practitioner from year to year.

Quite as important from the standpoint of recognizing truth and avoiding error, is the study of the natural history of disease, which is sometimes subordinated by the advanced student to therapeutic considerations. Manifestly, if we do not bear constantly and sharply in our minds that which will take place in the course of disease if left entirely to the way of nature, we are not adequately armed to determine what has been the effect of the means employed to combat the disease conditions, by the means medicinal, surgical, hygienic or psychological.

In the history of the fads and fancies of medicine, and of the various methods of treating disease which have had birth from time to time outside of medicine proper, such as mesmerism, Christian science, various forms of faith cure and mental healing, this fact stands out prominently and incontestably, that many of the reputed cures—and all have been credited with many cures—are easily accounted for and explained on the basis of the natural history of disease. When a patient consults a physician, receives a remedy in the form of a medicine, takes this medicine, finds himself much improved or entirely well, he quite naturally attributes his improvement or cure to the remedy prescribed by the physician. This is not only natural but commendable, and any other belief on the part of the patient would be regarded as at least ungrateful by the physician.

So when a patient seeks the help of any other kind of healer, whether his cult be faith cure, Christian science or what not,

and improvement or complete restoration to health supervenes, what could be more natural again than that the patient should attribute his release from the grip of disease to the ministrations of the healer? And on the other hand, what could be more natural than that the healer should interpret the circumstance in the same way? Granting that such a healer is sincere in his belief in his own power to heal, his conclusion from his standpoint is justified. For he is ignorant of the natural history of disease. His education and initiation into practice have embraced neither the recognition nor the natural course of disease. With his eyes fixed on the heavens above, "his wagon hitched to a star," he and his followers acclaim the triumph, and so cults grow.

It is not claimed that many of these cures are not as real as many of those which follow the ministrations of the regularly ordained physician. But it is manifest that many of such cures would have been wrought by time alone, and a knowledge of the natural history of disease would have prevented the deception to which both healer and patient were subjected.

In similar self-deception the skirts of the medical profession are not always, perhaps, entirely clear. To deceive a patient knowingly, and not for his but our good, is reprehensible; but how much more so for the physician to be self-deceived, seeing results where none have been obtained, claiming accomplishments which the way of nature alone has achieved, unaided by the physician, sometimes in spite of his interference.

This is not therapeutic pessimism or nihilism. It is not intended to argue that disease is not benefitted by intelligent and well adapted treatment, whether such treatment be medicinal, surgical, hygienic or purely psychological. But it is intended to urge as strongly as possible that the physician must be on guard, constantly and alertly, lest he become the victim of his own enthusiasms, and attribute to a wrong source the changes which are apparently wrought under his hands.

SOME DISJOINTED OBSERVATIONS UPON OUR TECHNIQUE.*

BY A. MORGAN CARTLEDGE, LOUISVILLE.

For the past few meetings of this and some other societies I have been somewhat disappointed on finding little or nothing about our old friend, technique. Several years ago it was different; like water in the

* Temporarily at Berkeley, California.

* Read at the meeting of the Southern Surgical and Gynecological Association in Baltimore, Maryland.

little song, "Technique, technique everywhere."

Well, it is a good thing to exchange recipes every now and then, to know how the boys are washing their hands or whether they are washing them at all; whether they are wearing gloves and if so what kind, and a hundred other little manners of the surgical kitchen.

While the current literature is always more or less full of improved points in technique, I learned years ago that this, like most subjects, gives its best to discussion among the men who work. I am sorry I have nothing new to offer you, no additions. My few remarks will probably partake more of the destructionist than of the constructionist, but, seriously, I believe anyone who can demonstrate satisfactorily how to simplify our technique by the omission of any detail has added greatly to its structure. I have always considered the after management of abdominal operations a very important part of the technique, and so it is. You had a little free for all, go as you please at that yesterday. The old time hair pullings we used to have over these points did much to relieve us as well as to impress the young in the field.

During the years each of us in turn has evolved from his daily task, somewhat, a practice, a technique of his own. If it has proven satisfactory in meeting the requirements of modern aseptic surgery, and is less cumbersome or in any way more desirable than usual ways, then he has a right to speak and be jumped upon in the proper baptismal rite. I am still washing my hands—in fact, believe that I do it better every year, and think that you do, or did, but without knowing it; hence, when gloves came about you adopted them.

A few words about gloves:

That the hands are the most important feature connected with sterilization, there can be no question as it is universally recognized that infection through the hands is the chief source of infection at the time of operation.

I am not opposed to gloves as a general proposition, but I do claim that they have objections as well as advantages. In cases where the all-important sense of touch, in deep and inaccessible parts, where touch alone is vitally important, they are a distinct disadvantage. Again, in rapid and neat work they are a drawback. Really, I think we have not attached enough importance to the question of infecting our own hands while we were paying all attention to the question of infecting the patient. I wear

gloves in infectious cases to protect my next patient. In clean cases I make everybody else wear them, but believe that I make my own hands sterile and am able to do better work without gloves. A glove is a great thing to the surgeon in septic cases, and a great thing for all assistants and nurses at all times.

As to the method of cleaning hands, I have nothing new to offer. I simply advise lopping off what I consider some unnecessary, hence bad, technique. Green soap and water with brush, making the test when the hands get to the condition of the washerwoman, then immersing the hands in alcohol.

As to sutures and ligatures, I am using more catgut and the Pagenstecher linen instead of silk.

There is one feature in the technique of a few surgeons (and formerly of many) to which I desire to call attention in these desultory remarks.

Do you still use iodoform? Gentlemen, I sincerely believe that if you fully appreciated how objectionable you are to decent and refined people when saturated with iodoform, that you would strive your utmost to do away with this, to my mind, worthless smeller. In common with the majority of our profession, I employed it for years and thought it absolutely necessary to my success. I never use it or any substitute now, and can truthfully (but not tearfully) say, "I miss you."

Yesterday Dr. Boldt in his remarks before the Society touched upon the question of purgatives before and after operation. I feel that this is too important a part of our technique to pass over. While the liberal movement of the bowels previous to operation is essential, our former system of purging the patient with salines until he could scarcely stand up, was a very bad one tending to make the life of the patient subsequent to operation worse than miserable by adding to post-operative thirst. This, however, is a slight harm compared to the common practice of purging people violently the second and third day after abdominal operations. The patient was supposed to be empty previous to the operation, has had nothing to eat for two days, and then another purgative! This of itself is enough to make many people ill. A gentle enema the second or third day, repeated if necessary, is all quite sufficient, and in many cases I do not give a cathartic until the fifth or sixth day. Of course, this does not apply to cases of great distention, or where there happens to be indications for a cathartic.

Scopolamine-Morphine.

While I have never used this as an anes-

thetic, and do not very well see how others can get their consent to rely upon it for that purpose, as a preliminary to ether, except in the old and those with a kidney lesion, an excellent thing. The patient has less nausea, less pain and less mucus in the throat, all very desirable.

Now, I have offered you nothing new, I simply want to add my experience in favor of simplicity in technique and reliance upon things that are tried and true, always remembering that the most complicated and so-called highest order of technique alone cannot give good results in surgery.

Our most famous quartette in surgical technique, is heat, soap, salt and water.

MEDICAL TREATMENT OF GALL STONES.*

By R. ALEXANDER BATES, LOUISVILLE, KY.

From 1655 when Keulmann first observed biliary calculi up to 1868 when Bobbs accidentally performed cholecystotomy, medical treatment alone was practiced. From that time forth various mechanical schemes began to be suggested for the removal of gall stones. The more scientific measures were less and less discussed, until now some are honestly ignorant of the solubility of cholesterolin gall stones. Hence the many quotations entering into this paper exploiting the effect of medical treatment upon biliary calculi.

Equal parts of turpentine and ether, Durand's mixture, was recommended in 1782. Vallismiri before this had observed that gall stones were soluble in turpentine. Pujol, J. P. Frank and others reported cases successfully treated. Of more recent date Lewaschew's observations have revived this treatment. Botkin likewise has reported success. Nothnagel states its action is due to the fact that both ether and turpentine are eliminated by the bile. Both ether and turpentine are solvents of cholesterolin and both stimulate the bile expelling apparatus.

James Chenoweth reports the successful use of ether, injected through a biliary fistula following cholecystotomy, to dissolve a calculus in the common duct.

The hydrated succinate of the peroxide of iron has long been satisfactorily used.

Ouchterlony in 1877 in a paper upon

"Cholelithiasis," said, "I have used this salt in almost every case with complete success."

E. S. Sherrill, of Detroit, reports removal of gall-stones with this preparation, used after the manner described in Ouchterlony's paper.

Buckler adds additional cases.

Frank C. Wilson has also observed the passage of biliary calculi after the use of this drug.

It has long been conceded one of the best prophylactic remedies.

Olive oil in cholelithiasis was first suggested by Kennedy of America; Chauffar, of France, and Rosenberg of Germany, soon endorsed it. Since that time, scarcely a paper on the subject of cholelithiasis—neither medical nor surgical—has appeared without mentioning olive oil. Every medical paper has emphasized that particles of saponified fat, or stearates resembling gall stones were present in the stools of individuals upon olive oil.

No medical paper, so far as I am aware, has ever suggested the slightest connection between these masses and biliary calculi. In spite of this, occasionally a surgeon is to be found who insists these masses have been mistaken for biliary concretions.

Senator, Blumm, Clemm, Hoffman, W. A. Thompson, (Sajour Anal-Cyclop) and hundreds of other clinicians have used olive oil with perfect success.

Dujardin-Beaumetz remarked that the failure of olive oil in hepatic colic constituted the exception.

Mayo Robson (Sajour Anal. Cyclop. of Practical Med.) "Allowed to stand in olive oil a gall stone (which) lost 68% of its weight in two days and in three disintegrated."

Lindley Scott (Ed. in Nothnagel's Enc.) found that olive oil caused a quarter of the weight of calculi to be lost in twelve hours; half their weight in twenty-four hours; and all but the nucleus was dissolved in thirty-six hours.

Broekbank and others have testified as to this solvent action of olive oil upon biliary calculi.

That olive oil does dissolve fresh cholesterolin calculi is within the proof of every operator.

Nothnagel says olive oil has been recommended to promote the dissolution of gall stones and that fats really enter the bile has been stated by Virchow and Thoma.

Potter says there is much clinical evidence to prove that olive oil administered internally is a very efficient remedy for biliary colic.

*Read before the Jefferson County Medical Society and Kentucky State Medical Association, October, 1906.

Hare believes olive oil has a similar effect upon the gall bladder to an emetic upon the stomach, and produces a relaxation, which may aid in the expulsion of the stone, and that the glycerine and fatty acids of the olive oil liquify and increase the flow of bile.

Morris (Sajour Anal. Cyclop.) reports a case in which gall stones remaining in the common duct after cholecystotomy, were removed after six weeks treatment by injecting olive oil into the gall bladder through the external biliary fistula.

The logical proposition then appears—gall stones are 90% cholesterin; cholesterin is normally held in solution in the bile by lecithin and oleic acid in the alkaline medium; that olive oil in the test tube dissolves fresh cholesterin calculi there can be no doubt; that olive oil has caused the subsidence of all manifestations of cholelithiasis there is abundant proof.

Olive oil is rich in lecithin and oleic acid, lecithin and oleic acid (fats) are eliminated by the hepatic epithelium (Virchow and Thomas).

Therefore olive oil, internally administered, causes the evacuation of gall stones by the cholesterin dissolving effect of its lecithin and oleic acid, *which are brought into the presence of the calculi by the epithelium lining the gall-bladder and bile ducts.*

So far as available literature and personal observation are concerned only the bilirubin-calcium of gall-stones appears unchanged in the evacuations of those receiving olive oil internally. Whitish masses, resembling nasturtium seed are present in greater or less quantities in the stools of many of these patients.

These masses have not always been tested to verify their cholesterin composition, but they are totally different from the saponified stearates or "surgeons delights."

Lipani has been suggested by Senator instead of olive oil.

The Carlsbad and other alkaline aperient treatment has been used by a multitude.

Naunyn (quoted by Kraus, Sajours, Anal. Cyclop. of Prac. Med.) says "I have not the slightest doubt but that the Carlsbad cures have the best influence on the course of cholelithiasis. I have seen a considerable number of dangerous gall stone incarcerations which lasted a long time, terminate favorably.

Kraus says the cures can be taken at home and should last from four to six weeks.

Nothnagel thinks the Carlsbad waters, in quantity, probably lessen catarrhal conditions of the biliary tract, and stimulate the

peristaltic action of the bowel musculature, and this stimulus is transmitted to the musculature of the bile ducts, consequently is often followed by the passage of gall stones."

Arnold Lorand, of Carlsbad, commends this treatment and offers a similar explanation to that of Nothnagel.

Fink (quoted by Porchheimer), reports 72.8% of good results and 4.95% recoveries from the Carlsbad treatment.

Hydrochloric acid and the chlorides, particularly ammonium chloride in twenty grain doses, have been reported as expelling biliary concretions.

Glycocholate of sodium (Practical Med. Series May '03) in one per cent solution will dissolve cholesterin stones in three or four days at body temperature.

Stevenson (ibid) reports three cases of recurrent hepatic colic in which he used this solvent with good success.

Keown states glycocholate of sodium is the only drug, which will increase the excretion of solid matter in the bile; that it dissolves cholesterin and bile pigment, hence prevents the formation of gall stones.

Richardson's experience and opinion coincides with that of Stevenson and Keown. He uses it in from five to ten grain doses in capsules using magnesium oxide as the excipient.

An acid oleate of sodium, or soap (Practical Med. Series May '03) dissolves cholesterin to the extent of 50% of its own weight.

Happel, Naunyn, Clemm, Blum, and others recite clinical success with this preparation. Clemm believes all cases of pure cholelithiasis curable by the use of this soap, and details eleven cases in which favorable results were obtained.

Silver nitrate (Pract. Med. Series '03) used by means of gastric lavage until its cholagogue effect was obtained, is reported by Ehrlich as having been successful in 95.5% of twenty-two cases treated.

Dioscorea Villosa, Shoemaker (Materia Med. and Therap.) says "Quickly relieves pain and spasm, and provided the calculi are not of extreme size, leads to their prompt expulsion. Dr. Swain's patient (Ky. State Med. Soc. Tran. 1902) from whom hollow gall stones were expelled was receiving dioscorea and olive oil.

Carduus Marianus is mentioned in every Materia Medica as exerting a favorable influence upon the passage of gall stones. It is especially prized by the German clinicians.

Chionanthus Virginica (Ky. State Med. Soc. Trans. 1899) is accredited with the ex-

pulsion of one hundred and thirty-two gall stones in a case reported by Spiedel.

Valerianate of Amyl. (Sajours Anal. Cyclop. of Prac. Med.) is both a solvent of cholesterin and an antispasmodic to the bile expelling apparatus.

Pouchet (Am. Year Book of Med. and S. 1891) recommends its use because of its cholesterin dissolving properties and Blanc (Sajour. Anal. Cyclop) recommends it for its sedative effect upon the musculature of the bile expelling apparatus.

Toluyldiamin (Am. Year Book of M. and S. 1900) is commended by Brunton, Willoughby and others. Willoughby reported the cure of a case of three years standing by two months treatment of toluyldiamin in one and two grain daily doses.

Chloroform is quoted by Nothnagel from Corlieu, Bouchet, Gobley, and others as having the same effect upon gall stones as ether and turpentine. Petroleum and sweet almond oil were found by Lindley Scott to exert the same solvent properties upon calculi as that of olive oil.

Fabiana Imbricata grows in popularity on account of its effect upon the mucosa and has been accredited with the power of dissolving mucin of the calculi.

Salicylic acid and the salicylates promote the fluidity of the bile. Alkalies in general and most cholagogues are conceded to lessen inflammation of the mucosa and raise the bile pressure, which though greater than the pressure in the portal circulation, is relatively small.

Succinate of soda and other succinates have been favorably reported upon.

Oleates, unmentioned in this paper have been individually reported successful.

Many physicians dilating upon the treatment of gall stones have combined some of the above group with laxatives.

Thus Reynold Webb Wilcox (Jour. Am. Med. Aug. 4, '06) reports successful treatment of thirty-five cases of gall stone disease, with the following combination of drugs—acid oleate of sodium, salicylic acid, valerianate of amyl., menthol and phenolphthalein.

A synopsis of fourteen cases of gall stone disease observed in private practice, and of which I have positive record shows that four were males and ten females, two were under thirty-five, one an alcoholic, the other a multipara twelve were between thirty-nine and eighty years old.

All had some medical treatment. Three were operated upon and died, two medically treated had a recurrence of attacks.

One is still under observation and nine have been apparently cured by medicine.

Scheuer (Munchener Med. Woch. June 12, 1900, Sajour Anal. Cyclop.) analyzed the cases of cholelithiasis treated in the St. Hedwig Hospital at Berlin during ten years. Eighty-nine cases were treated medically and forty-three surgically. Of those treated medically, fifty-three were traced. Twenty-three had a recurrence of attacks in from one to eight years. Four had to be operated upon and four died. Making a mortality of 4.4%; 41.5% were cured or twenty-two of the fifty-three traced. (The thirty-six untraced were at least relieved of the attack for which they were in the hospital since the report does not say they were lost trace of because they fell into the hands of the surgeon.) Of those surgically treated the mortality was 12.5%. However only two per cent died as the result of operation.

Harley & Barratt (Jour. Phys. June 15, 1903) introduced fragments of cholesterin calculi into healthy gall bladder of dogs. In every instance (five) the calculi were dissolved. Calculi introduced where cholecystitis already existed and calculi introduced with micro-organism into healthy gall bladders remained undissolved. In addition to these unequivocal records concerning the solubility of cholesterin calculi a few opinions may be quoted. Nothnagel says "In rare cases only will it be necessary to consider the advisability of surgical measures from the beginning."

Kehr (Am. Year Book Med and Surg. 1900.) in 1898 after much experience in the operative treatment of cholelithiasis and the occurrence of the disease in his own person says "Internal treatment, especially by the Carlsbad cure should be recommended for (1) obstruction of the common duct (uncomplicated) (2) In cases of inflammatory processes of the gall bladder, if these are of rare occurrences and not very severe. (3) In attacks of frequent colic when gall stones are passed with each attack. (4) In those who have serious diseases of the heart, lungs, kidney or liver; or who are the subjects of obesity, severe gout, or diabetes. (5) In persons who have already been operated upon."

J. Weiner, Jr. (Med. Record July 8, 1905.) says, "The ideal method of handling doubtful cases of gall-bladder disease is to treat them medically during a few attacks.

Deaver (Jour. Am. Med. Aug. 11, 1906.) says, "Since every tenth body contains gall-stones the most enthusiastic surgeon must recognize that every patient does not require an operation." Deaver quotes Kocher who

says, "Gall stones do not belong to the surgeon, but the operative is the quickest and surest treatment."

Deaver concludes "When a patient is seen with a frank attack of cholelithiasis which does not subside under judicious medical treatment pursued for from thirty-six to forty-eight hours, I think then the safest course is to do cholecystomy at once."

Chauffard says, "There should be no surgical treatment of gall stones."

Reynolds Webb Wilcox (Jour. Am. Med. Assoc. Aug. 4, 1906) says, "Voluminous as is the surgical literature on gall stones, a careful consideration of the subject leads me to place surgery as adapted only to gall stones of gall bladder origin and then only under conditions which demand mechanical relief. Consequently the treatment of gall stones is almost entirely medical."

J. L. W. Thudicum (Med. Pres. & C., Vol. 14, 208, 210, 97) says, "Those who look at the formation of gall stones as simply the result of local changes and do not study the general constitutional conditions which give rise to them are like those of whom Strohmeyer speaks. 'They hear the little grass grow, while the thunder rolls unobserved in the upper ether.'"

It scarcely seems necessary to characterize such sentiments as "surgical treatment alone avails in gall stone disease" as manifesting undue haste to perform unnecessary surgical operation.

Such mania secandi, such egotism would be unexpected even in a tyro. Such narrowness is not an excrescence upon the profession that should be cut off, but ample rope should be furnished that the hanging may quickly occur.

At the risk of being tedious a few physiological facts must be mentioned in suggesting the therapy for the correction of such imperfect physiological chemistry as results in gall stones.

The composition of human bile is given by Stewart as:

Water	982 parts in 1000.	} 13 parts in 1000
Solids—		
Mucin & Pigments	....1.5
Lecithin & Soap	.....1.0
Bile Salts	.....7.5
Cholesterin	......5
Inorganic Salts7.5	

"Mucin is not formed by the bile secreting cells, but by mucus glands of the larger bile ducts and especially of the gall bladder. Fresh bile has a considerable antiseptic power, mucin, however, causes bile to putrify, then the bile loses its antiseptic power."

That micro-organisms play an important part in the formation of gall stones has been asserted by Naunyn, Nothnagel, Deaver, Ochsner and others. The following reasoning appears to satisfy the conditions existing in such cholelithiasis:

Gall stones are usually formed in the gall bladder and in the larger ducts, that is, upon the site at which the mucin is added to bile. Now if stasis of the bile occurs, mucin causes it to putrify. After putrification takes place, the bile loses its antiseptic power, and even attenuated micro-organisms may live therein.

Gall stones usually are composed of 90 per cent. cholesterin and the rest bilirubin-calcium and a nidus.

Cholesterin is held in solution in the bile by lecithin, the alkaline salts and the compounds of potassium and sodium with the fatty acids.

Vaughan & Novy (Cellular Toxins 296) assert bacteria, also acids and alkalies, decompose lecithin into a base (cholin,) glycerin, phosphoric, stearic, oleic, and palmitic acids. Thus lecithin, the chief solvent of cholesterin in the tissues, is broken up by bacteria permitted entrance by the putrification, which is brought about in the stagnant bile by the mucin.

Hence the precipitation of cholesterin to unite with the bile pigments, salts, mucin, and the nucleus to form the gall stone.

Lecithin treated with baryta water yields a soap barium stearate. Lecithin and soap are present in the normal bile in greater quantity than cholesterin. May it not be possible for the easily precipitated stearate of the lecithin to form both matrix and nucleus, especially if assisted by bacteria and mucin? It has been shown calculi may form from pathologic conditions of the biliary tract; repeated experiments have likewise demonstrated that cholesterin calculi are dissolved in normal bile or in the physiological gall bladder.

If these factors mentioned alone existed it is believed many spontaneous cures would result with the subsidence of the cause of biliary stasis.

Thudicum (Sajour Ana. Cyc. Prac. Med.) says "In most cases gall stones result from a decomposition of bile into simpler substances."

Mignot (ibid) determined by experimentation upon animals that bile, stagnant in an aseptic gall bladder has no tendency to precipitate.

Cushing (ibid) concludes that the simple presence of organisms in the gall bladder does not seem sufficient to set up inflammation of

the mucosa nor produce cholelithiasis.

Naunyn believes gall stones are the result of lithogenic catarrhs of the mucous membranes of the gall bladder and biliary ducts excited by microbes in stagnant bile.

Hunter believes toxins excite a catarrhal condition of the mucosa as well as microbes.

Thus we conclude—bile stasis, putrefaction, micro-organism, cholesterin, precipitation, coincident with lithogenic catarrh of the mucosa very probably are the steps of gall stone formation in many cases.

Yet many conditions constantly present would be ignored if we stopped here. Still (quoted by Bryan, *Southern Pract.* Dec. '05) collected ten cases of infants dying shortly after birth or still born in whom gall stones were found, seven were jaundiced. Probably neither micro-organisms nor catarrh of the bile ducts existed before the formation of these calculi.

Again, infection from typhoid fever and other micro organisms is progressively less and less after the thirty-fifth year, while gall stones are progressively more and more frequent after the thirty-fifth year.

The frequent occurrence of cholelithiasis with nephrolithiasis, with arterio-sclerosis, with obesity, asthma, gout and other diseases of deficient oxidation has been universally observed. Lorand (*Monthly Cyclop. of Prac. Med.* June 1906) observed gall stones in girls with degeneration of ductless glands (thyroid and ovaries) which govern the process of oxidation.

Naunyn states one out of every four women have gall stones and 90 per-cent of these have borne children.

In brief, all conditions characterized by an excess of organic acids in the system are associated with cholelithiasis. This excess of organic acids in the liquids and solids of the body cause a liberation of basic calcium from anatomical structures in which this substance is contained (Lyman). Calcium thus put into circulation unites with the fatty and biliary acids to form insoluble salts, no longer capable of holding cholesterin in solution. The precipitation of cholesterin from bile, if calcium be added, has been often demonstrated. Cholesterin is a product of retrograde metamorphosis, consequently, is formed in greater quantities after the thirty-fifth year.

Vaughan and Novy (previously quoted) have shown that lecithin of the bile is decomposed by the action of acids and alkalies, as well as by bacteria. Consequently, where cholelithiasis is not the result of precipitation of cholesterin by the decomposing action of

bacteria in stagnant bile, putrified by mucin; it is believed to be due to exactly the same decomposition of the lecithin, shown by Vaughan and Novy, to occur in the presence of acids and alkalies.

With these facts before us, can any one assert a single claim made for olive oil is irrational? Olive oil supplies lecithin and oleic acid, the natural solvents of cholesterin. Lecithin and oleic acid, fats (Virchow & Thoma) are excreted by the biliary epithelium, so that in the gall bladder they may act just as observed in the test tube. That this is true the abundant clinical proof makes positive.

All other cholesterin solvents probably act as olive oil. Many of the medicaments undoubtedly stimulate peristalsis, lessen the inflammation of the bile ducts, remove the systemic acidity, and restore a normal bile, which effects the solution of the calculi. Carlsbad is probably the most striking example of this.

Lorand quotes Doyon as having shown that the biliary ducts contract rhythmically every fifteen or twenty seconds and thus the bile is expressed.

Such preparations as dioscorea must act upon this bile expelling apparatus.

The object of this paper was the hope of making clear the rationale of medicines upon calculi already formed. The hope of arresting any arraignment of medicine against surgery. The honest physician and the honest surgeon must go hand in hand. Their work is complementary. Surgery supplies the mechanical effect impossible to medicine, and must undoubtedly have saved lives where exhaustion would have occurred ere solution of calculi could take place.

DISCUSSIONS.

W. W. Anderson, Newport: I think that there is very little danger of the surgeons taking possession of all our cases of cholelithiasis because the patient will have something to say about this matter. I am glad that this question has been brought up. The medical features and the management of cholelithiasis have been well set forth. In this day when the surgeons seem to be reaching for almost everything, it is well for us general practitioners to be bolstered up just a little bit. I would like to suggest one thing, both to the extremists among medical men and to the extremists among the surgeons, that these "never" rules do not hold good. To say never treat a case in any but a medical way, and never treat a case in anything but a surgical way, is all wrong. Never make a "never" rule.

One point which I did not hear mentioned in the paper and which I think is of great value

practically is to watch the habits of the patient with reference to eating. I think that many cases of cholelithiasis and cholecystitis are provoked to a recurrence through errors in diet. Some people ought to board in a livery stable from the way in which they eat corn. A well-behaved horse would do it better. I had this illustrated on one occasion when I asked the wife of the patient to watch for the expected gallstones in the stool. I told her what they would look like, and she told me the next day that she had captured a whole handful. It was corn that she showed me.

I believe that we should watch for these things because they will provoke a recurrence of the trouble, this faulty manner of eating.

J. R. Morrison, Louisville: I think that Dr. Bate should be highly commended for reading such a scientific paper on the medical treatment of gallstones. It is true that surgeons do much good in this disease, but that there is a medical treatment I am thoroughly convinced, and Dr. Bate has attempted to prove this in a very scientific manner.

That gallstones should not be operated for always seems to me to be evident from the fact that a great many people have gallstones without knowing anything at all about it because the stones do not cause any trouble, about one body in every ten that comes to the post-mortem table will show gallstones, and over half of these cases have not been diagnosed. There has been no evidence of the existence of the gallstones. Therefore, if, when you have a case of gallstones which causes symptoms, and you can bring these symptoms in abeyance and put the patient in a condition where he does not know that he has gallstones, he is all right. And if you keep the patient that way by medicinal treatment, I see no reason for an operation. But if the patient does not improve under medical treatment, if he suffers constantly from toxemia, his heart becomes weakened and his pulse becomes more rapid, if he has continued attacks of pain in region of gall bladder, or is suffering from the condition which occurs frequently in gallstones, as was pointed out by Osler, intermittent and remittent fever, and the patient grows worse instead of better under medical treatment, then I think that he should be referred to the surgeon. Where there is an obstruction so that the stone has not the chance to pass out, as is manifested when the patient is suffering from obstructive symptoms, then the case should be treated surgically.

I have asked the best medical men in Louisville whether they have seen results from medical treatment, and they have told me that they have seen positive results in that their patients have gotten along in such a manner that they

have not suffered from the presence of the stones, the patient getting along as well as usual so that there is no reason for attempting to remove the stones by surgical means.

As regards the treatment with olive oil, I am sure that it will do much good. I have not used this treatment very much. I have resorted more to means to bring about a healthy condition of the bile. I have used chlorid of ammonia which is good for catarrhal conditions generally and we have such a condition here in the bile channels. A good combination is a mixture of chlorid of ammonia and the salicylate of ammonia, putting them into a palatable mixture. I have seen a considerable number of cases very much improved by this treatment.

In combination with this treatment I think that the regulation of the diet plays a very important part. We want a diet that will relieve a catarrh of the stomach as well as a catarrh of the bowels, a diet that does not contain too much carbohydrate. I believe also in the administration of alkaline water, the Carlsbad salt given in a large quantity of hot water in the morning before breakfast and a small quantity given at night before retiring. I think that it is best in these cases not to eat too heavily three times a day, but to partake of moderate meals three times daily, and to eat a little between times, because the bile is more liable to stagnate in starvation than when something is going through the bowels. That was well brought out by a recent observer in New York who had occasion to observe a biliary fistula in a member of his own family. By frequent feeding he accomplished excellent results in the condition of the bile.

There is every reason to believe that we have a medical treatment. Carl Beck, of New York, a prominent surgeon who has operated on many cases of gallstones says that it is just as bad to let these patients go on to a fatal termination as it is to advise operation in every case that is diagnosed as one of gallstones. He says that there are thousands of operations to show that many patients are relieved by medical treatment. This from a prominent surgeon. Therefore we must come to the conclusion that medical treatment is indicated in very many of these cases. It should, at least in most cases be given a trial before surgical intervention is advised.

Oscar E. Bloch, Louisville: Dr. Bate's paper was very interesting; I hope his pleasant experience in curing his gallstone cases without surgical intervention will continue, but I feel sure that he will, some day, regret having carried on his medical treatment so long that his patient will be beyond surgical aid.

I think Dr. Bate's statistics are a bit unfair in that no consideration is given to the fact that

the surgeon's patients often have been exhausted by long medical treatment and seek the surgeon's assistance as a last resort; furthermore, can the internist say that his patient is cured?

Dr. Morrison made the point of frequent feeding as a preventative against the recurrence of gallstone colic; I heard Prof. Ewald, of Berlin, make the same suggestion, and I believe it to be a good one.

I don't understand why reference should be made to the frequent finding of gallstones on the post-mortem table, the patient having died from some other cause; this affects neither the surgical nor the medical treatment.

I think Dr. Bate should remember that gallstones may become an etiological factor in cancer of the liver. I have had one such case in my own work—a patient refused a gallstone operation and died four years later from a carcinoma of the liver.

G. G. Thornton, Lebanon: I have had a number of cases that were seen by other physicians and that had been pronounced as cases of gallstone colic, that recurred with more or less regularity every six weeks to six months, and in all of these cases I used for the colic olive oil and the chloride of ammonia. I do not know whether the olive oil did very much good, but from Dr. Bate's paper I take it that it did; but to relieve the catarrhal condition the chloride of ammonia surely did its part. I can recall a large number of cases where it was used and used faithfully for some time afterward, for six months I know, with no recurrence of the trouble in any of the cases.

I had one case, a lady, who had been seen by a number of doctors and amongst them a country surgeon. I do not know whether an operation had been advised or not, but her attacks had been recurring repeatedly every six weeks to three months. When I saw her she was suffering from an attack. She was jaundiced and had a temperature of 102°. By the administration of olive oil and chlorid of ammonia in ten grain doses every three hours she was quickly relieved and from that day, it is over a year ago, she has not had a single recurrence, and she had had many in the last six years prior to my seeing her. Her case is only an example of a number of others.

In another case there was an impaction. The gall bladder was distended until it was as large as a hen's egg. I asked a surgeon to see the case with me, expecting that an operation was required. I had been giving him olive oil and chlorid of ammonia and before the surgeon arrived the stone passed and I had nothing to show him. The patient was removed to a hospital, but declined operation. He did not have a recurrence for six months after that, and I have lost sight

of the case since then so that I do not know what the ultimate outcome was.

William Bailey, Louisville: We ought to eliminate from this discussion cases of jaundice that occur from catarrhal troubles, gastro-duodenitis being one source. These are distinctly medical cases, of course, and under my observation the treatment of the catarrh by the preparation of ammonia alluded to or phosphate of soda is quite successful. But I think that we ought to come down to the point where gallstones have already been formed and are possibly a source of obstruction by engaging in the common duct and causing gallstone colic. I think that then the question ought to be discussed as to whether it is medical or surgical case.

The administration of olive oil undoubtedly promotes the removal of the gallstones. I believe that fully, but I do not believe that it does it by making the gallstone smaller by any solvent action. I do know also that people oftentimes are deceived. The small particles of oil becoming semisolid are recognized as gallstones by the laity. I have had a paper full of such stones brought to me as showing the success of the oil, but a day's rest in the warm office did away with these gallstones. They are often mistaken for gallstones particularly by the laity and sometimes by the doctor if he does not investigate carefully.

I am not as sanguine as to the medication when the gallstones have formed as is my friend, Dr. Bate. I wish that I had been able to carry more faith and confidence in the medication than he has at present. I have not been able to carry it up to my time of life. I do not believe that it is possible by the administration of oil to have enough of it eliminated by the liver and brought in contact with a large-sized gallstone obstructing the cystic duct. I do not believe that we can bring enough oil down from the blood to dissolve the gallstone. It seems to me to be a physical impossibility to enable the system to bring down enough of the solvent to do any good.

Of course, the oil will promote the passage of the stone, but we know that many of these stones are not really passed through the common duct. Oftentimes when patients have been relieved it has been by the gallstone producing ulceration and passing into the intestine or somewhere else without going through the common duct. Hence I believe that we have coelithiasis as a medical disease.

As to the prevention. You can prevent the formation of gallstones, but I am not so sanguine as to the solution after they have been formed. A gallstone placed in any solvent is not dissolved for a long time, even under the most favorable circumstances, and I know that

we can not create such a condition in the body as putting the stone in a vessel full of oil. So many men have gallstones and know nothing about it. If we can produce a condition where that state can be brought about, where the entrance of the stone into the common duct can be prevented we are doing much good. If gallstones are formed in the bile ducts, the medical treatment to lessen that would be very favorable, indeed, but after they have been formed and are in the gallbladder I do not think that medical treatment will remove them or lessen their size so that Nature can remove them. But if that can be promoted, if we can bring to bear any influence that will favor their removal, well and good, but I really feel that we are powerless to produce such a result.

R. C. McChord, Lebanon: In the first place, I do not believe in the possibility of dissolving gallstones in the gall bladder. I believe, however, that there is a time when medical treatment will do good; I do not mean produce a cure. We talk about the cure of gallstones. When is a case cured. We can relieve a case temporarily, but when is a patient cured? A patient goes on for years with gallstones; the gall bladder, fortunately, is a very accommodating organ. Men who have held post-mortems know that many gallstones are found in the gall bladder without inconvenience to the person who has them. It is the small stones that do the most harm, not the large ones.

There is a stage of the disease where medical treatment is indicated, and a stage where surgical treatment is indicated. When the stone gets to be large it produces very little irritation, as long as it is smooth, it will do very little harm, but when the stones are small they do harm. Even in that condition the stones are expelled, but the gall bladder is in a condition to produce more stones at any time. The bile is naturally a germicide. As long as you keep up the free flow of bile through the bile ducts, the patient will not be inconvenienced very much, but when there is an obstruction to the outflow of the fluid then the patient is in danger.

I do not believe in operating on every case of gallstones, but I do protest against feeding a man on olive oil for years and years when in three weeks you can relieve him of his trouble by an operation, which in the present stage of surgery is not at all a procedure accompanied by much danger, and the mortality is very low. Besides the patient can be well in three weeks' time, when it would take years of medical treatment to even give relief, to say nothing of establishing a cure.

In my city two men suffered from repeated attacks of gallstone colic. They were warned repeatedly to be operated on. They recovered un-

der medicinal treatment for the time being, and one of the men went to Carlsbad and remained abroad for several months in real good health. The other man was very anxious to have an operation done during an attack of colic. The operation was refused at that time but he was advised to be operated on as soon as he had recovered, but he failed to do so. These two men lost their lives because they would not take the advice of the surgeon and be operated on at the proper time.

Every one of you know of just such cases, and I believe that it is wrong for us to say that gallstones can be dissolved. It is wrong to put off these patients after repeated attacks because they are temporarily relieved and then to say that the patient is well and that an operation is not necessary. I want to protest against this prolonged course of treatment of gallstones, but these cases should be operated on at the proper time, because the results are always good. The long process of treatment should be discarded.

Dr. W. H. Wathen: I too want to congratulate the essayist upon the paper he has presented to us this evening. The paper when considered carefully in all its aspects will force a man who has been dealing with gallstones surgically, and who has seen hundreds and hundreds of cases treated just as described in the paper and then referred to the surgeon when it was almost too late for operation, to insist that they can only be relieved by surgery. Then the fact that he brings before us more remedies for gallstones than I thought were in the materia medica is sufficient proof that we must not be governed by any such ideas as he has presented to us this evening.

There never was and there never will be a gallstone dissolved by any known remedy in the gallbladder by any internal medication. There will be gallstones passed from the gall bladder and from the bile ducts following the use of medicine and without the use of medicine, but that does not indicate that such patient has been cured for the Mayos have shown in their report that they have never operated on a case where gall stones have passed that there were not other gallstones in the gall bladder to be passed and it is the exception—I doubt if one in a thousand cases where all the gall stones pass from the gall bladder.

Now, then that does not mean that there is no medical treatment for gall stones. We all recognize that there is a so-called medical treatment. There is a treatment without medicine that may bring a condition that will not necessitate operation.

We all know that one out of every ten persons has gall stones and we know that probably not more than one per cent. ever go to anybody for

treatment—the physician or anybody else; hence, they get along without medicine at all. We know that many cases that manifest gall stone symptoms will probably under any kind of treatment, rest and diet, will get along without surgical treatment, but we know this, that there are to-day thousands upon thousands of people going to an untimely grave because of the delay in not operating upon these cases where the gall stones have passed one time and passed again at a recurring attack.

The same argument offered this evening was offered by the physician and used against operating for appendicitis. Medicine cured appendicitis; and now, gentlemen, I do not believe that many people have the courage to say that there is any medicinal treatment for appendicitis. It is possible that a case of catarrhal appendicitis may never recur without a dose of medicine; it may recur in a week or it may recur in two years. The patient may go to his grave without an attack. But there is not a case of well marked appendicitis positively diagnosed that ought not to be operated on. I will go further and state that there is no well marked case of positive gall stones in the gall bladder or in the gall ducts that is not safer with an operation than without it. Many patients go to their graves with a complication of gall stone diseases. Every surgeon sees cases that were treated for months and years by physicians and we find a gall bladder contracted down in a little knot or find it full of pus or possibly ruptured making a dangerous operation out of what was a simple one.

Now, what is there against the gall stone operation? Is it a dangerous operation? No. If the physician will send every case to the surgeon before any serious complications have arisen, while it is still a simple case, there may be a single stone or a dozen stones in the gall bladder, or even a stone in the ducts, we will find that there will not be three per cent. of deaths. If those cases are let alone there will be finally twenty-five per cent of deaths.

Dr. Sherrill: This is a beautiful essay delivered in excellent English, poetical at times. I believe that Dr. Wathen has touched upon the fallacies in the essay. In discussing any remedy that is said to be able to dissolve gall stones there is a chemical fact that should be emphasized and that is that to produce a solution of any substance we must have finally developed a large quantity of the solution. This cannot be true in the gall bladder. It is contracted in many cases and is capable of holding but a small quantity of fluid. Studying the composition of gall stones we find that they are ninety per cent. of cholesterol with practically no water at all and in order to get a small gall stone dissolved—and some

have been reported as large as a goose egg—the gall bladder could not hold the fluid, and I agree with Dr. Wathen that no gall stone has ever been dissolved in the gall bladder.

Granting every contention that the doctor has made, granting every contention as to the solution of gall stones outside of the body he can never get such a condition inside of the gall bladder in the living body. Oftentimes we have ascribed the result in these cases to treatment and later experience has shown it to be fallacious. The essayist cited a case reported by Dr. Frank Wilson in which a gall stone passed after the use of a certain remedy. No man doubts that such a thing can happen. Many gall stones are passed by an ulceration from the gall bladder into the intestines.

The problem hinges on the solution of gall stones. Nobody denies that there is a medical treatment for gall stones; nobody denies that we can get some relief from medicine in these cases. We do not know of any agent that will produce a solution of gall stones in the gall bladder. I believe this statement is so fallacious that it is capable of doing great harm.

The reason that we lose cases of gall stones is that they are allowed to remain in the gall bladder and ducts and excite attacks of infection, the stones being allowed to remain until they produce symptoms of jaundice before a diagnosis is made and the delay produced by the treatment recommended by Dr. Bates causes the death of many patients. It is a teaching that ought not to go before this Society without contradiction.

Dr. Schachner: I agree fully with what the two gentlemen have said—Dr. Wathen and Dr. Sherrill. The point in this trouble is this, let us take those features about which there is no controversy or cannot be any controversy. I believe that it is admitted on all sides that ten per cent. of individuals suffer from gall stones. This is borne out by pathologists and it does not mean that all of that ten per cent. have gallstones suffer from gall stones and these cases do not become a case of gall stones clinically until they begin to suffer and then the gall stones begin to cause trouble. Let us put that first.

It is generally agreed that gall stones are produced in the gall bladder at first. It is also agreed that early in the trouble—it must be agreed if we agree that there are cases where we have gall stones and the patients do not suffer at all—we must agree that when they begin to suffer the gall stones begin to cause trouble. Then we must agree that we have an inflammation of the gall bladder and a disturbance of the cystic duct first and the common duct next and then we have pancreatic trouble; in other words the disease is progressive. At first it is not noticed; then there may be just a little pain the first time

the stone attempts to pass out of the gall bladder; then there is a gradual progression of the trouble and with this a progression in the mortality. We know that when we operate on a case of gall stones while they are still in the gall bladder and the gall bladder is not infected the mortality is practically nil. We know that as the trouble progresses the mortality rises.

Now, then, a weak point in Dr. Bate's paper is the number of remedies he recommends. It simply shows the uselessness of treatment.

Now if we agree that as the trouble progresses the mortality increases who is going to assume the responsibility for this risk? That is the practical question for the patient. If the chances are only four per cent. in the beginning of the trouble and by the time he gets into the hands of the surgeon it has increased to fifteen per cent. who is responsible for the fifteen per cent of risk? I think when the internist undertakes to treat gall stones he ought to place that before the patient.

The internist cannot prove his case. He gives a remedy and the gall stones pass; they pass without a remedy; how can he prove that they would not have passed? He is unable to prove his case. It is very much like the question of appendicitis and terminates the same way. If a man now has appendicitis and an early operation is done and he dies the surgeon is asked why he died. If he is operated on late his family goes to the internist and asks him why the patient was not operated on earlier. They know that the responsibility must be placed somewhere, and when the public get up to the point in this trouble and place the responsibility where it should be, then will the subject change and not until then.

Dr. Speidel: I wish to thank Dr. Bate for the paper. I do not agree with him in treating these cases that it is possible to dissolve the gall stones and I have never treated them with this view. I have treated the condition and I consider the term, cholelithiasis as meaning the condition that leads to gall stone formation or is attended by gall stone formation and it seems to me that the rational treatment is directed toward the relief of the catarrhal condition of the duodenum, stomach and bile passages—that when these passages are in a healthy condition the gall stones will remain quiescent and do no harm as in cases found at portmortem examinations.

The way a stone is passed out when the treatment is carried on is as greenish strings of mucus; this is found in the majority of cases where the treatment is given. In the cases where the patient has very large gall stones that cannot pass out through the ducts these are the ones that are most easily rendered quiescent. The smaller ones will slip into the passages and

cause pain, or it may be pass out before these strings of mucus and these patients show no signs of gall stones in later years. I think patients often suffer from gall stone colic and the gall bladder is empty.* By watching the feces oftentimes we find a material like coffee grounds in the stools and as a general thing is passed after gall stone colic; it may be supposed that this gall stone passed out. Most small gall stones are forced out during these attacks and it may happen that a large number of gall stones are passed out at one time and the presumption may be that they passed out through a fistula between the gall bladder and some part of the intestinal tract.

It seems to me that it is rational for the internist to apply treatment for the condition when the patients first come. It is reasonable because most patients are not ready for an operation at once, and if the internist refuses to treat them they will use other means and if I had the money that is spent for a popular remedy—fruit-ola—I would be a rich man. By refusing these patients proper treatment in the beginning we force them to resort to quacks.

It is not wise to operate on patients when they are intensely jaundiced as under these circumstances there is great danger in controlling the hemorrhage. These cases must have medical treatment and it seems to me that the internist is the proper person to treat these patients in conjunction with the surgeon.

The criticism of the number of remedies advocated by Dr. Bate in his paper is perhaps unjust because I believe the number of remedies used in the treatment of this condition can be cut down to three or four remedies. The salicylate of soda, bicarbonate of sodium and ammonium carbonate have been mentioned and when we mention such remedies we mention a class and each does not constitute a distinct remedy.

I believe that one should explain to these patients what can be done by medical treatment and what can be done by surgical means. The patient will get the quickest relief by operation by making an incision in the abdominal wall at the site of the gall bladder and removal of the gall stones. We know that the majority of patients fear an operation and we cannot get them to submit to an operation at once. If the cases are intelligently treated such cases will probably respond to treatment and I believe that if the patients are not benefitted or relieved at the end of three months they should be operated on.

Dr. Bullitt: Referring first to the remarks of Dr. Meyers I would say that if we really have quarrels of any kind I think we should understand that we are not quarreling over the patients; we are quarreling about the disease.

I am satisfied that there is no more honorable man in the practice of medicine than Dr. Bate. Every statement he has made he has made because he believed it to be a fact. His paper is a learned disquisition and the many authorities quoted and much of the treatment quoted is entitled to respect because it is venerable—much of it dates back to the seventeenth century.

I agree with the other gentlemen who have said that whenever we find so many remedies recommended for a disease it is rational to suppose that none of them are very reliable and when Dr. Bate went over that long list of remedies, many not familiar to me, it occurred to me to wonder why it was that anybody who had gall stones had not been cured in the ordinary treatment of other diseases because in the treatment of these diseases he must have taken several of the remedies recommended for gall stones.

I believe, gentlemen, we have made one mistake—all of us except Dr. Speidel. I think he has given us a fair discussion of this subject. The mistake is that we have discussed gall tones rather than the other diseases of the gall bladder which simulate gall stone disease. I believe we make a mistake in speaking of the medical treatment of cholelithiasis. I believe that the medical treatment of patients having gall stones so that the stones are dissolved into their original elements and passed from the bowel cannot be proved. Dr. Bate and I have talked over this matter and I know of an experiment which he did not refer to, viz., we took some gall stones and placed some in ether, some in olive oil and some in turpentine. I think there were two other solutions that we put them in but these two I do not recall. These gall stones were placed in test tubes but we did not get a solution of any of these stones.

They had been without the patient for some time much to the benefit of the patient. When we come to the rational physiology of the solution of gall stones we are bound to arrive at it in this way, but Dr. Bate explained—which should be emphasized—that no claim is made that he can get olive oil into the gall bladder. He said that the substance is absorbed by the blood and excreted by the epithelium of the gall bladder and the gall ducts and later he said by the mucous membrane of the gall bladder. Now, gentlemen, when we consider how much olive oil is absorbed and how much is excreted in other ways, because it has no selective action on this particular part as an excretion of this particular substance, you would conclude that the amount excreted by the gall bladder would be small.

When stones are present in a large gall bladder mucus is present in the gall bladder. Whenever we have a large gall bladder it means one under pressure; there is an interference with the exit to the bowel through

the cystic duct. Under such circumstances we do not believe that any but an infinitesimal amount will be excreted by the gall bladder. Where we have a contracted gall bladder the mucous membrane has become degenerated and under these circumstances we have a small excretion of this substance because of the fewer number of healthy cells in the mucous membrane.

J. R. Wathen: I have just one word to say, that is in reply to one internist. It is a statement that should not go unchallenged by the surgeons. I refer to Dr. Wilson's statement in regard to a complete cure. He states that after the surgeon has removed the gallstones he does not cure the condition; he relieves the gall bladder and that should be a great argument in favor of internal treatment. In explanation of that I think it should be stated, as has been demonstrated time and again by Mayo Robson Moynihan, the Mayos of this country, that the object of surgical treatment is not the removal of gallstones, but primarily the drainage of the gall bladder. This is the primary indication in every case of gallstones and if you do not provide drainage you have not produced a cure. We have a typical analogy in the urinary bladder. If we remove a stone from the bladder and provide proper drainage the urine clears up, the pus disappears and the bladder epithelium is exfoliated. This is true in bile duct surgery.

Another point, as to the radical cure of these cases, statistics prove that the great majority of these cases get well. Of course one or two stones may be overlooked and later passed, but it has been proven by the men who have done so much work in this line that the great majority of these cases are cured by surgery. The most important thing is not the removal of the stone, but the draining away of the infection.

Dr. Leavell: I suppose I belong to that class of practitioners that might be called hybrids. I am trying to be one of the old-fashioned practitioners.

I have a little specimen here which I think would be sufficient for any medical man practicing medicine pure and simple to demonstrate to his mind that he could not do anything in a medical way for a gall bladder like that. We must remember that there is a peristaltic wave more or less present at all times expelling the contents. With the presence of fibrous tissue it is impossible for that process to be maintained. These stones came out of that gall bladder; they are faceted. The gall bladder became thickened, interfering at all times with the peristaltic wave. Now, admitting the possibility of olive oil, discorea or turpentine having any effect on the gall bladder or any part of the body, what effect can it have in a structure like that which is worse than an ordinary test tube?

I have here a specimen in which medical treatment was of no effect at all. It should have been effective in this case. You will observe from the character of the stones that they should have passed. One of the gentlemen who discussed the paper to-night had the patient under observation at one time and the patient was treated medically with various drugs and with olive oil and the stones failed to pass. Later I removed just a few stones like that demonstrating that the medical treatment was ineffective even under the best possible chances. The gall bladder was pervious to bile nor was it bound down by adhesions and a small stone like that should have passed. It is a stone that could have passed through the common duct. It did not pass. Why? Because there was too much interference with circulation through the common duct. As soon as this little stone entered the common duct the irritation set up produced a contraction of the duct and forced it back into the gall bladder.

Now, it must be admitted that such a noted authority as Osler is worth something in this country—the English were glad to get him. Osler was not quoted by any of the internists who have discussed this subject this evening. He says “there is no medical treatment for this disease.”

We must agree that many cases come to the surgeon for gallstones which are not gallstones at all. If you will read a report in the Medical Record for October of Robert Morris' who is recognized as an eminent authority you will find that he discusses what he calls gall spider cases in which there are adhesions between the gall bladder and the liver and adhesions between the gall bladder and the intestines—small fibers running down between the gall bladder and the bile ducts interfering with the peristaltic waves. These are the cases where we have functional indigestion. Now, those cases are surgical in the beginning. Now, these cases can be relieved by surgery, the adhesions can be broken up, we can get better drainage and relieve the condition.

Now, the question, of course, I believe will resolve itself just as the question of appendicitis resolved itself, and the medical man, I do not care how prominent he may be in the medical world when he subjects the patient to medical treatment for gallstones; he may figure out the chemistry all he pleases, he may put the gallstones in test tubes, but when he runs up against a gall bladder like that or gall spider cases he is out of business. He cannot treat them. I believe that gallstones, like other stones that make good roads should be taken out and placed on the rock pile.

Dr. Herndon: I would like to ask Dr. Bate

one question, and that is how much olive oil is required to dissolve a given amount of cholesterol. I had a patient take a gallon of olive oil at the rate of a pint a day without result. I had another patient to whom I administered a rectal injection and he passed a large number of stones.

Dr. Bullitt: I would like to ask Dr. Bate whether olive oil adulterated with our cotton seed oil will dissolve these stones?

Dr. Nettleroth: I would like to say that I placed two gallstones in a bottle every few days and I investigated it and these stones still give the click of a hard body when they strike against the side of the bottle.

Dr. Bate, closing the discussion: In regard to the diet, which was not mentioned in the paper. I agree with what has been said. By means of medicines we correct the condition at the time; by hygiene and diet the cure must be made permanent. I believe that inasmuch as the condition is attended by an excess of organic acids, that the best diet for these patients is the so-called anti-uric acid diet.

In regard to the presence of gallstones in the feces: By far the majority of cases of gallstones treated by medicines show in feces that we do dissolve the cholesterol, which is the only thing claimed. The majority of stones contain 90 per cent. of cholesterol; a small proportion contain 60 per cent. of bilirubin-calcium, which can not be dissolved. These particles are very small and are bound together by a matrix of cholesterol or other material which is soluble. Consequently we frequently find great quantities of small particles in the feces which have the appearance of sand—bilirubin-calcium.

As to Charcot's intermittent hepatic fever, I believe that this can be explained along the line that Vaughan and Novy brought out. The material into which lecithin the normal solvent is broken up, that is cholin, has been shown to be highly toxic. This is further broken up into neurin, which is highly poisonous, and muscarin, of the mushroom, which is also poisonous. I believe that in time there is an accumulation of these materials, and if they are not removed or drained off, either by surgical intervention or by an opening up the channels by medicine, that the patient may die, as they sometimes do from paralysis and from other causes. I believe that Charcot's hepatic fever is explainable by this action of cholin.

In regard to the medical statistics, it was mentioned that most of the statistics quoted were those of surgeons. Dr. Reynold, Webb Wilcox, in a recent article in the Journal of the American Medical Association, says, “A careful consideration of the literature leads me to place surgery as adapted only to gallstones of gall-

bladder origin, and then only under conditions which demand mechanical relief—obviously only a very small part of the subject of gallstone disease—which is entirely medical. When we consider that postmortem records prove that from 6 to 10 per cent. of all cadavers show the presence of gallstones, three-fourths of these being in persons over 40 years old and that not more than one person in twenty who carries a gallstone becomes aware of its presence through any symptoms which it may cause, and of those who have symptoms not all require an operation, it is readily seen that the field of surgery is decidedly limited, although of great importance when it is indicated. Gallstone-disease is not purely a disease due to a foreign body but is primarily a hepatic disorder. The removal of these stones has but little to do with the cure of the patient, for when the end result, the removal of the gallstones, has been accomplished by surgery, the patient is but at the commencement of his treatment to remove the cause of the disease, which is entirely within the province of the physician. The congestion and inflammations in the domain of the portal system are the conditions that require treatment, and the infectious catarrhs of the bile ducts and gall bladder and the faulty bile formation in the liver are those that need correction. These are purely medical problems."

This quotation, the one from Carl Beck's article, which was mentioned by Dr. Morrison, is exceedingly interesting. Dr. Beck says, "The so-called common gallstones are the main contingent of cholelithiasis. Their form, size and color are subject to frequent change. Oftenest they are of the size of a pinhead; rarely they attain to the size of a hazelnut. Their exterior may be of a white-yellow or brownish tinge. In consistency they are usually soft so that one can easily pulverize them. The nucleus is the softest. The crust is fairly hard. There is no crystalization. The center of the nucleus often shows an elliptical or stellate cavity which contains a yellow alkaline fluid as long as it is protected within the nucleus."

Dr. Beck further states that peristalsis stimulates the flow of bile "therefore laxatives almost always work well. A Carlsbad is to be the most highly recommended. Under this form of treatment I have induced many a confrere to cure a patient whom he had turned over to me as 'ripe for the plucking.' There are thousands of proofs that the majority of gallstone sufferers are cured by medical treatment." (N. Y. Med. Jour. Sept. 8, 1906.)

CONCUSSION OF THE BRAIN.

BY T. H. GARVIN, HORSE CAVE.

We class under this head all symptoms which result simply from the shaking more

or less violently of the contents of the skull. It will be observed that most cases of severe shaking of the brain are likely to be complicated by visible lesions. The skull may be broken and the brain may be contused or lacerated. It is highly probable that well-marked and even serious symptoms may be produced by severe shaking and without the existence of any lesion discernible either by the eye or microscope. We must understand that this element of concussion, the result of shake, independent of lesions enters into nearly every case of head injury whatever may be the other lesion, it is usual to find that the brain has been more or less severely shaken. Thus it may easily happen in cases in which conspicuous lesions are present, such as fracture of the base of the skull, yet then the symptoms of concussion are still the most prominent. Now to state positively that concussion alone does produce death this would be hard to prove from the fact that nearly all cases of severe concussion are complicated with lesions in same either externally or internally and we know that many cases do recover who have had severe shake-ups complicated with visible lesions, yet many will die who have the lesions complicated. They may go from a few weeks to many months at times and then die. We had in our town a boy ten years of age who fell a distance of ten feet who was unconscious for several days, but finally seemed to recover fully, but in about one year he was seized with pain in his head and fever followed by unconsciousness. He gradually became more comatosed and died on the fourteenth or fifteenth day.

Concussion may be divided into three stages, first, that of collapse; second, that of reaction; third, that of convalescence or recovery. Symptoms of the first stage are a collapse with paleness of the skin, dilation of the pupils, cold, clammy perspiration, weakness of the limbs with inability to stand or walk. It is claimed that these symptoms are produced by the mechanical driving of the cerebrospinal fluid into the fourth ventricle from the large cranial cavities by the force of the blow on the elastic skull and the pressure of the fluid in that situation on the important centers of respiration and circulation and at the same time produces a certain amount of cerebral anaemia, showing as it does that the blow on the head acts on both the nerve cells and blood vessels, at the same time suspending and weakening the functions of the cells. Unconsciousness being the first symptom of concussion. The function of respiration being the first to be suspended before the heart ceases to act therefore artificial respiration would be one of the means to be used to re-

suscitate a patient from concussion of the brain. I think that, clinically, it would be very hard to distinguish between pure concussion and those symptoms that are due to very slight lesions of the brain, such as slight contusions of lacerations and small capillary hemorrhages. There is no doubt but that these slight injuries can be produced by very light blows on the skull. You have seen the experiment performed on the cadaver by trephining the skull and placing a cover glass on the brain and striking a blow on the skull not sufficient to fracture the skull and you will find that the glass will be broken, thus showing that the injury in concussion of the brain is on or near the surface next to the skull, a clinical fact showing that unconsciousness is the chief symptom in concussion, showing a disturbance of the functions of the cortex as the main cause of that condition. The diagnosis is to be carefully made and is between alcoholism and apoplexy. In alcoholism the temperature is subnormal, but if the alcoholism threatens to be fatal the temperature will be normal or sometimes above. In apoplexy the prostration is profound, there are also symptoms of compression. In simple concussion the prognosis is generally good, the symptoms usually disappearing by degrees, the patient falling into a quiet sleep, awakening after a good nap feeling all right, except being weak and tremulous with sometimes a giddy headache for a while.

Treatment.—First, perfect rest in bed, ice to the head and hot bottles to the feet and keep the patient in a recumbent position on account of the feeble pulse, but as soon as the circulation is restored the head should be elevated so as to arrest any hemorrhage that might be going on. Stimulants should be cautiously used to keep the reaction from being too strong. The safety of the patient depends on perfect quietude. Keep the extremities warm and the head cool. Ether and ammonia are to be preferred to other stimulants as they are safer by being more evanescent in their action. Keep down all excitement so as to leave the brain at rest for ten days or two weeks at least. Give morphia hypodermically if patient is very restless and strychnia if the heart is weak, calomel to move the bowels and light diet.

Report of Case. — On the morning of Dec. 17th, 1906 at or about 6 o'clock I was hurriedly called to see Mr. W. M., who lived six miles in the country. I reached there about two hours later and found him in bed suffering most intensely. He had fallen through an opening in his barn loft, a distance of twelve feet, striking on the right frontal

bone, there was considerable contusion from the junction of frontal with right parital, extending to right cheek and the right eyebrow and eyelid with considerable hemorrhage from the nose. He was unable to stand or walk at all, he having crawled on hands and knees from the barn to the house, a distance of one hundred and fifty yards. He was perfectly rational but suffering most intensely over the region of the medulla, no loss of motion in any part of the body or of any muscle, said nothing else hurt him at all but begged most piteously for relief of the pain in the back of his head and neck. Pulse full and about 84, respiration rather shallow but all right as to regularity and frequency, temperature 98.

I gave him hypodermically morphia 1-4 and atropia 1-150, which gave him great relief in about forty minutes. He remained quiet as we kept his feet warm and his head cool, in about two or three hours he became very sick at his stomach and vomited freely quite a lot of blood with large clots. He then remained quiet and said that he was easy. I remained with him until late in the evening and I left him with a normal temperature, respiration twenty, expressing himself as being comfortable in every way, still some slight oozing of blood from nose. I gave him four half-grain calomel tablets to be given at intervals of two hours through the night. I called over the phone next morning his wife said that he had rested quite well had taken some milk and his bowels had moved and said that she did not think it necessary for me to see him that day, so I left home to see a patient several miles in the country and did not get home until after night. I found that my patient was not doing well as they had called me two or three times during the day, I went at once to see him. I found his temperature up to 103 1-2, pulse 140 and very weak, respiration 40 and irregular, dilatation of pupils and in a semi-unconscious condition. I remained all night with him keeping cold applications to head and hot to his feet. I gave him strychnia gr. 1-60 repeated it in three hours his pulse and respiration both were better but would go up in three hours or less. I gave spts. ammo. and ether, he failed to respond to anything and at 9 p. m., the 19th he died.

I could not find any indication of any fracture of the skull at any point. I suppose that the pain over the medulla was caused by the fluids of the other cavities of the brain being forced into the fourth ventricle, but no loss of any of the muscular power of any of the muscles, no contraction of the pu-

pils at all. This case shows how guarded you should be in your prognosis as it seemed after the first twelve hours that he had a good chance to recover. But the history of all these cases who after the first reaction goes off and remains but a short time and the temperature goes up and a rapid increase of circulation with a gradual weakening of the consciousness, show that your patient is going to a fatal ending.

A REPORT OF A CASE OF CARDIAC ASTHMA.

By W. M. EWING, SMITH'S GROVE, KY.

I wish to report a case which came under my care on the 15th of December, 1905, while assistant physician for the Tennessee Coal, Iron & R. R. Co. Patient's age 62, color black, male. Gave a history of a gradual decline in general health for a period of 6 or 8 years, but not a very great loss of weight. Commencing with an attack of dyspepsia and having recurrent attacks at variable intervals. The doctor had told him he had asthma, which fact was very evident upon my seeing him for the first time. The case seemed to be one of an ordinary bronchial asthma, with no special features. I gave a saline purge and $\frac{1}{4}$ gr. morphia hypodermically every 45 minutes until the paroxysm was relieved. I then prescribed:

R—Pot. Chlor. Pot. Iod. a a $\frac{3}{4}$ iv.

Tr. Lobelia fl. 3 5.

Elix Simplex q. s. ad $\frac{3}{4}$ iv.

M. & ft. Solution. Sig. Teaspoonful every 3 hours. He seemed to get along very well for a time, but it soon proved to be only temporary and the attacks came on with increasing frequency, severity, and of longer duration. Urinary examination negative. Nutrition much impaired and it was with the greatest difficulty that any food was retained, the slightest amount causing extreme nausea, but rarely emesis. About 5 weeks after I had first seen him, and seeing him at intervals all during that time, oedema of the lower extremities developed, accompanied by an almost incessant cough and inability to assume the horizontal position, which caused me to make a heart examination which should have been done upon my introduction into the case. It revealed a well defined aortic regurgitant murmur which was, of course, uncompensated. He was put on Infusion of Digitalis and within 12 hours the oedema had completely disappeared and the last I saw of the case in August, 1906, had never had another paroxysm of asthma. I was unable to elicit any information as to the

probable cause of the heart lesion. The literature on the subject of cardiac asthma, which has been available to me seems entirely too brief.

THE ORIGIN OF MEDICAL SCIENCE.*

By W. M. BLAIR, GLENSFORK.

It is the custom of essayists of the present day, to write on the new discoveries of medicine, and in endeavoring to offer the new things, essayists frequently state for facts, theories that have not been proven and that will not stand the test of experience. While this is the case, my subject will cause me to write some of the very old things of medicine: so old that it will perhaps sound like a fable; but while it sounds like a fable, I shall endeavor to deal in facts. The first history of physicians that we have is found in Genesis 50:2, where Joseph commanded his servants, the physicians (of Egypt), to embalm the body of his father, Jacob. The art of medicine was cultivated to a high degree in ancient Egypt. We don't know whether the healing art was cultivated or not, but the physicians were expert in the art of embalming, even surpassing the experts of to-day. Some of their embalmed bodies exist, tolerably well preserved, to the present time. We learn that the body of Rameses II was found in the year of 1881 in a very good state of preservation. Rameses II was the Pharaoh who oppressed the children of Israel while in Egypt. He was, perhaps, the king who built the first pyramid 3500 years ago, yet his body is now in a museum at a place called Boulak. Who of our present day could do such work? Some of the learned have thought that Moses, having been instructed in all the learning of the Egyptians, must also have known the chief secrets of medicine. They argue it from his accurate diagnosis or indications concerning disease, leprosy, infirmities of women, clean and unclean, etc. But when Egypt's political greatness departed, her arts and sciences departed also. And medicine had such a set-back, that it went into superstition. The origin of the medical profession came about by the separation of medical truths, from their union with priest-craft. Primitive man, with no experimental knowledge of disease, looked upon pain and sickness as indicating the wrath of the deity, supposed to have created man, and having unlimited power over the work of his creation, could afflict his creatures at will, either in anger, or as a later theologian has taught "that the glory

*Read before the Adair County Medical Society.

of the Divinity might be advanced." To understand this deity, to be able to communicate with him, and to appease his wrath, were attributes assumed by certain ones who, by working upon the credulity of their fellows, impressed these with a belief in such pretended supernatural powers. In this way originated the priesthood of pretenders, or healers. I am sorry to say that we have some of the same and similar pretenders today, in the faith cures, the Christian science healers, the seventh son healers, the magnetic healers, who pretend that they can send what they call an absent treatment of magnetism, on the principle of wireless telegraphy. If the fool killer would come along, I think he certainly would do a thriving business. To this same class belong the Indian medicine man, who pretends to cure by incantations, and unintelligible mutterings. Also the ignorant negroes of the South, who pretend to cure diseases by a species of witchcraft that they call voodooism or hoodooism, and it is believed by the negroes that these same pretenders, can bring on sickness by the same mysterious means.

But to get back to my subject, in order that these priests should retain their hold upon mankind, it was necessary that in the treatment of the sick, their efforts should be attended with some degree of success, and this led the ancients to study the phenomena of disease, and to search after remedies, to cure the sick. Thus the first medical truths were associated with priest-craft. But the practice of medicine by the priest physicians was so mixed up with the rites and ceremonies of their religion, that the truths of medicine were obscured by this superstition, and cures effected were believed to be due to supernatural agencies.

About three hundred or four hundred years before Christ, when the learning of the Grecian philosophy was at its height, Hippocrates, born of a family of priest physicians (the eighteenth lineal descendant from Esculapius), effected the separation of medicine and priest-craft, and medicine, divorced from priest-craft has ever since maintained a separate existence, its followers recognizing Hippocrates as the "father of Medicine." Hippocrates was born in the Island of Cos, about 360 years before Christ. He is said to have admitted no one to his instructions without the solemnity of an oath, in which the chief obligations are the most religious attention to the advantages of the sick, the strictest chastity, and inviolable secrecy concerning matters which ought not to be divulged. The books attributed to him amount to 72, of which many are perhaps spurious, the books

were perhaps small pamphlets. I have one of his books, translated into old English, kindly furnished by the Arlington Chemical Co. The title of it is Aphorisms of Hippocrates. His picture also appears on the back of the book. I also have a copy of the oath I spoke of a while ago, called the "Hippocratic Oath." But even though more than twenty-three centuries have passed since then, and notwithstanding the great advancement in medical science, and of general knowledge, the ancient teachings of the priesthood have retained such hold upon mankind, that it is no uncommon thing to hear sickness spoken of as "the mysterious ways of an all-wise Providence."

Superstition has a mighty hold upon the world, and with its twin sister, ignorance, obstructs the path of progress and shuts out the light of scientific truth. I am proud to know that regular medicine is taking a scientific stand, during the last half century, while priest-craft has taken a back seat. The science of medicine is a natural science. Its principles and laws are deducted from the close observation of phenomena, and their scientific classification when observed is, perhaps the most difficult of all the departments of natural science. The subtle forces with which it has to do, often elude our instruments of investigation, and baffle the power of induction itself. But wonderful advancement in clinical science, and the improved facilities for observing and recording phenomena, and the talents and learning arrayed in this field of labor, may we not hope that we shall live to witness triumphs compared with which, anything in the past will dwindle into insignificance, that we shall divest of the terror the "pestilence that walketh in darkness." In fact, we have seen the latter largely consummated, small-pox almost rendered harmless by Jenner's discoveries of the vaccine disease, yellow fever, almost controlled by isolation and the war of extermination on the mosquito by the use of kerosine, in their breeding places, and cholera held in check by the same means, and by general sanitation. May we not hope to see the great white plague "Tuberculosis" largely controlled by the means now being organized to control that dread disease? May we not hope to soon find a specific for cancer, and all other diseases now considered incurable?

Gentlemen of the Adair County Medical Society, let us study, and labor, and do our part to secure these desirable ends.

MISCARRIAGE AND ITS TREATMENT.*

BY W. H. STROTHER, BIG SPRINGS, KY.

In looking up the definition of miscarriage we find that abortion and premature birth are synonymous terms, so a not an uncommon division of this subject is into abortion and miscarriage, and premature birth. Abortion is usually applied to the expulsion of the foetus before the fourth month, and carriage from the fourth to seventh, and premature birth from the seventh month up to the end of pregnancy. Miscarriage is the expulsion of the contents of the gravid uterus before the foetus is at a viable age and when the expulsion is not produced by criminal measure. If the expulsion of the gravid uterus is due to criminal measure then the term criminal abortion should be used. The course of miscarriage is pain, hemorrhage, dilatation of the cervix, and the expulsion of the contents of the uterus.

Miscarriage is the direct result of either foetal death or uterine contractions. The duration of miscarriage varies according to the period of gestation, the condition of the os and cervix, and the energy of the uterus. As a rule miscarriages are slower than normal labor at term or it may rapidly be expelled after a few gushes of blood and a single painful contraction, these cases are however but rarely observed.

In early miscarriages hemorrhage is the leading symptom and it is the first that attracts attention in the majority of cases. It is often excessive and alarming and may be so profuse as to endanger the mother's life. Hemorrhage may precede pain many hours or even days, or in rare cases it takes place conjointly with pain. If there is persistent hemorrhage, miscarriage usually occurs, but in spite of the bleeding which may continue for some time or return at intervals during the whole duration of pregnancy the case may go on to full term.

If the cervix becomes markedly softened and the os dilated, the foetus will ordinarily be cast off. If the hemorrhage is persistent, the os dilates; if there is felt presenting within the os the foetus, if the pain is considerable and above all, portions of the ovum expelled, the miscarriage may be considered inevitable. It is well to have the expelled portions saved, so you can tell what is retained. The placenta is usually retained a long time in the early months, because the attachment is strong and fatty degeneration does

not occur soon; also in the early months, the placenta is not large enough to stimulate uterine contractions.

The prognosis of a miscarriage is good if everything has been expelled; if not it is bad, the retained parts leading to hemorrhage sepsis and disease of the uterus. While the membranes are intact there is very slight danger of hemorrhage. A miscarriage should not be dangerous to the mother, but after effects may be bad.

Uterine disease often follows, because the women do not take the same care of themselves as they do at full term. A miscarriage is very rare without some hemorrhage. Earlier the miscarriage, sharper are the pains and less bearing down feeling. In an incomplete miscarriage pain and hemorrhage will continue as long as any portion is left in the uterus.

We cannot tell how soon a miscarriage will terminate. Pain and hemorrhage do not always mean that a woman is going to have a miscarriage. The treatment of miscarriage will differ much accordingly as we wish to prevent or hasten the expulsion. The prophylactic treatment consists in removing the cause. There is of course a definite cause in every case of miscarriage, but sometimes this cause is so slight or obscure as to entirely escape notice.

In a case of threatened miscarriage we should notice the severity of the pains, amount of hemorrhage, and particularly the degree of dilatation of the cervix, for we should never give a patient anything when called to a case of threatened miscarriage without first making a digital examination. After making this examination we find the os but slightly dilated and the hemorrhage not too profuse we should give our patients opium and keep them quiet in bed and try to prevent her from miscarrying, as it is our sheet anchor in such cases with the fl. ext. viburnum prunifolium.

In the majority of cases of an inevitable miscarriage the delivery may be left to complete itself by natural forces unless the hemorrhage is excessive. If the hemorrhage is excessive, then use the tampon, it stops the hemorrhage, stimulates uterine contractions, and promotes complete separation of the ovum from the uterus. Before using the tampon be sure the bladder and bowels are empty. In cases of miscarriage when the foetus has been expelled and the miscarriage is incomplete the whole or portion of the placenta remaining it is advisable to proceed to clean out the uterus by the use of your hand or the curette. Sometimes you can remove the adherent placenta with the finger,

*Read before the Muldraugh Hill Medical Society.

but there is the thickened decidua which almost invariably remains behind in the early miscarriages, this cannot always be gotten with the finger so there is nothing better left to do, but use the curette, and in my opinion there is none better for this than the regular placental curette. If you are unable to remove a retained placenta or parts of one with the finger and circumstances are such that the curette cannot be used then you will have to resort to the use of the tampon and trust to nature to rid itself of the offending contents. Before using the cotton tampon or the gauze tampon it is advisable to introduce a strip of gauze just within the internal os and pack the cervical canal; this is more liable to bring on uterine contractions and expulsion than by just using vaginal tampon. In closing I wish to emphasize that we should be careful to be both aseptic and antiseptic and great care should be used in using the curette.

COUNTY SOCIETY REPORTS.

Anderson—The Anderson County Medical Society met at the office of Dr. Toll, May 6, 1907. Those present were Drs. Pindar, Gilbert, Toll, Crume, Lillard and Kavanaugh. Drs. Davis and Simpson were on the program for papers but were unable to be present.

At the request of the society Dr. Kavanaugh reported a case of measles that he saw in consultation with Dr. Townsend. This case showed marked exhaustion from the outset of the disease, from weak heart action. Digitalis, nitroglycerine and strychnia were used, also saline injections. Dr. Kavanaugh said that he thought that whisky was the stimulant indicated but the patient was unable to swallow. The patient finally died of exhaustion. There were no signs of any complications.

Dr. Toll asked if there were any signs of endocarditis. Dr. Kavanaugh said that he could distinguish no murmur, but that the sounds of the heart were very feeble.

Dr. Lillard asked if there were any oedema of the lungs. Dr. Kavanaugh replied that there was no trouble in the lungs. Dr. Lillard spoke of a case that he and Dr. Kavanaugh saw together, when entero-colitis followed the measles, but was now recovering.

Dr. Kavanaugh spoke of the great value of Koplik spots as a pathognomonic sign of measles.

Dr. Lillard reported a case to the society of a man that gave a history of having received an injury in the back. No trace of this injury could be found.

Symptoms—Convulsions, which were brought

on by any disturbance of the patient, contracted liver and skin gave off odor of urine. Patient was hard drinker, but being unable to swallow, had had no whisky during present illness.

Diagnosis—Uraemia.

Dr. Crume said that probably the withdrawal of whisky had something to do with patient's condition and suggested the use of a small amount of whisky per rectum.

Dr. Crume reported a case and asked the advice of the society. Patient 52 years old, children all healthy, history of chronic malaria.

In March, 1907, had an attack of La Grippe followed by measles, contracted cold, complained of severe pain in left side, vomiting, etc. Diagnosis—Pleurisy, jaundice present, liver enlarged, spleen enlarged and tender; pulse 120-130, temperature 100-102, respiration 28-30. A cavity was also found in left lung after patient had been taking syr. hydriodic acid.

Treatment—Side was tapped, morphia for pain, strychnia was given. Patient got better but had to use catheter to draw urine.

Bile pigment was still present in urine.

Dr. Lillard expressed the belief that the patient probably had tuberculosis. When being treated for chronic malaria.

Dr. Toll called attention to the fact that hydriodic acid (iodine) will make a latent tuberculosis of lungs assert itself.

After discussing at length matters of interest to the society, adjourned to meet with Dr. Lillard on first Monday in June. A special program has been arranged and it is hoped that every member of the society will be present as matters of vital personal interest to every member of the profession in the county are to be discussed and settled once and for all.

J. W. GILBERT, Secretary.

Carroll—The citizens of Carrollton and Carroll county, and the medical fraternity of several States, were shocked by the news of the death of Dr. Frank H. Gaines, which occurred at his home in this city Sunday, April 14th.

On Thursday after dinner, in going to his office, he stepped on a loose brick in front of the door, which caused such a jar to his body that strangulated hernia set up. Dr. Franks, of Louisville, was telegraphed and arrived here Friday at 10:30 with two other physicians and performed an operation, and Dr. Gaines was believed to be getting along nicely, but on Sunday about noon he complained of feeling weak and asked for a stimulant. After taking a sip of wine he told his son, Dr. F. M. Gaines, that he believed it was going to make him sick at the stomach, and after having been raised up, he expired before his head again rested upon the pillow.

Dr. Gaines was one of the most eminent physicians in Kentucky, one who practiced his profession because he loved it, and although he had graduated over a half century ago, he was as close a student up until his death as one who is taking a first course in medicine. Always responding to every call, he seemed not to care for the fees, and many times where persons were able to pay, only a small fee would be accepted, hardly sufficient to pay his horse hire. But such was the disposition of this truly good man, whom the people loved; a deeper or more universal sorrow was never witnessed than in his demise.

Frank H. Gaines, M. D., a native of Sullivan county, Tenn., was born November 24, 1832, and was the son of Samuel D. and Sarah E. Gaines, of Tennessee and Alabama, respectively, and of Virginia descent. His grand-uncle, Gen. Edmund P. Gaines, of Revolutionary fame, was commander-in-chief of the patriot army at one time, and it was he who caused the arrest of Aaron Burr for treason. Both the Doctor's grand-fathers were soldiers during the revolution, and served in the patriot army. The Gaines family were of English extraction, and came from one of the kings that reigned during the Heptarchy.

Frank H. Gaines remained on the home farm until 18 years old, when he went to Virginia to read medicine. In 1853-54 he was a student at the University of Louisville; in 1856 he graduated from the medical department of the University of Nashville, and then attended Jefferson College, Philadelphia, and Bellevue, New York, and the College of Physicians and Surgeons. At the breaking out of the war he returned to Tennessee, and in 1861 united with the Second Tennessee Battalion, in the Confederate service, and after the first year did duty as surgeon until the close of the struggle.

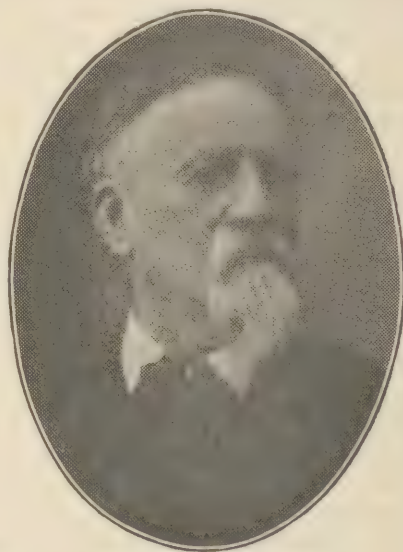
He then practiced a short time at Warsaw, Ky., and in 1869 settled in Carroll county. In October, 1857, he married Miss Almira McFarland, a native of Tennessee, who died in 1882. In 1883 the Doctor married Mrs. Priscilla (Lindsay) Fisher, daughter of Gen. Jesse Lindsay, of Ghent, who survives him, along with four children by his first wife—Dr. F. M. Gaines and Mrs. Wyatt Sebree, of this city; Mrs. Lester Lawrence, of Chicago, and Sherman S. Gaines, of Louisville.

After services at the late home on Wednesday morning at ten o'clock, conducted by his late pastor, Eld. W. J. Loos, assisted by Revs. Chandler and Rowland, the remains were taken in charge by the Masons, while six ex-Confederates—R. L. Bond, Jas. G. Ginn, T. J. McElrath, P. N. Demint, Jas. Coghill and G. T. Gardner—acted as pall-bearers, taken to Ghent for interment.

Never before has there been so many handsome floral tributes seen in Carrollton.

The following resolutions were adopted at a special session of the Carroll County Medical Society:

Dr. F. H. Gaines, of the University of Nashville, class of 1856, Jefferson Medical College, class of 1861; Bellevue Hospital Medical College, 1880; ex-president Carroll County Medical Society; member of the American Medical Association, Mississippi Valley Medical Association, and Kentucky State Medical Association, Medical Referee for Carroll County, died at his home in Carrollton, April 14, 1907, three days after an operation for strangulated hernia, aged seventy-five.



Dr. F. H. GAINES.

In the death of this eminent physician, the Carroll County Medical Society of which the deceased was ex-president, and up to the time of his death an active member, keenly feels its loss and deeply deploras his death. Dr. Gaines typified in every act of life all the attributes of a polished scholar and brilliant physician.

We miss his warm friendship, we sorrow with his family, and we feel in the loss of this talented associate a grief which words are inadequate to convey. We extend to his widow and children our heartfelt sympathy in their bereavement.

Resolved, That these resolutions be spread on the minutes of this Society, a copy be published in the County papers, and **Kentucky Medical Journal**, and a copy sent to the family of the deceased.

In behalf of the Carroll County Medical Society,

(Signed)

P. V. ELLIS, M. D.,

N. C. BROWN, M. D.,
J. P. WHEELER, M. D.,
Committee.

ally. The society will meet next in June, when they will be entertained at the Caseto Hotel at New Castle.

JOHN P. NUTTALL, Secretary.

Graves—The Graves County Medical Society met in the Court House Tuesday, April 16th, at 10 a. m. The following officers presiding:

B. F. Morris, President; J. F. Kirksey, Vice-President, and H. H. Hunt, Secretary and Treasurer.

G. T. Fuller read a very interesting paper on Nareomania, which was discussed by W. W. Richmond, Dismukes and Shelton.

W. W. Richmond, of Clinton was present and read a very able paper, "The Relation Between the Doctor and the People." This paper was very much appreciated by the society.

B. F. Morris read a paper, "Postpartum Hemorrhage." Discussed by Drs. Rozzell, Hargrove, Higdon. The following applicants for membership were approved and accepted by the society, A. R. Higdon, Fancy Farm; W. P. Alexander, Farington; A. B. Shelton, Boydsville; M. E. Thomas, Folsomdale.

The following resolutions were unanimously adopted by the society:

Resolved, That we, as a society, heartily endorse the efforts of the American Medical Association, through the Council of Pharmacy and Chemistry, appointed by them, in their fight against proprietary remedies and recommend that no member of this society prescribe any remedy unapproved by that Council.

The annual dues paid were: J. D. Pryor, M. N. Rozzell, J. L. Dismukes, Jr., J. L. Dismukes, Sr., Geo. T. Fuller, H. A. Shelby, E. A. Stevens, B. R. Merritt, B. L. Hendley, J. F. Kirksey, J. E. Craig, A. R. Higdon, W. P. Alexander, M. E. Thomas, S. Seission, W. B. Stokes, W. S. Hargrove, B. F. Morris, J. H. Shelton, A. B. Shelton, H. H. Hunt.

H. H. HUNT, Secretary.

Henry County—The Henry County Medical Society met in the Court House at New Castle, Ky., Monday, April 29, 1907.

The following were present, O. P. Chapman, W. F. Coblin, W. L. Nuttall, A. M. Zearing, F. J. Yager, Owen Carroll, W. B. Oldham, Louis Coblin, C. J. Hawkins, A. Wincott, O. B. Humston, Dr. Hower, of Crapper; Dr. Perkins, of Lexington, and Dr. Bowen, of Elizabethtown.

The chief card was Dr. Bowen, Councilor of this district, who was given the floor and spoke on organization which seems to have a very stimulating effect on the society as nearly every one responded with good resolutions and promises.

Dr. Bowen then read a carefully prepared paper on Tuberculosis, which was discussed gener-

Henderson—The Henderson County Medical Association met for its regular semi-monthly meeting Monday, May 13, 1907, at 8 P. M., in the office of W. A. Quinn, with Drs. Dixon, Dunn, Bethel, Quinn, Johnson, Wilson, E. N. Powell, Ligen, Forwood, Letcher, Poole and Griffin present. W. S. Forwood, President; Silas Griffin, Secretary.

Previous minutes read, corrected and approved.

No clinical cases were reported.

The regular program was then rendered.

Dr. Dunn read a paper on "Diphtheria" saying in substance: Diphtheria is a disease of local origin, caused by the Klebs-Löffler bacillus, which is always present in membranous deposit of a true diphtheria; with constitutional symptoms, caused by the absorption of a poison generated by this specific micro-organism, but in contrast to this deadly microbe another is found identical with it biologically and morphologically but lacking the power to destroy the lives of susceptible animals, the so-termed false or pseudo-diphtheria bacillus. These micro-organisms giving rise to the true and false diphtheria.

It affects the tonsils, pharynx, but may and often does extend to the nose and larynx and trachea, and is one of the most fatal diseases we have.

After citing the clinical features and calling attention to the importance of early diagnosis, the treatment narrows itself down to an intubation when necessary and the giving of anti-toxin though local measures are of benefit. In giving anti-toxin, give it early and in large doses, repeating often enough to secure effect.

Dr. Johnson read a paper on "Peri-tonsilar Abscess." Saying it is an acute infection of the tonsils and surrounding tissues, resulting in abscess formation and produced by ordinary causes of tonsillitis, with aid of pus-producing organisms.

He gave a nice description of the clinical picture. Under treatment, the main point was to evacuate abscess and let patient get well as they almost all do.

Discussion—The two papers were jointly discussed. Dr. Quinn confining himself to Diphtheria said:

"I heartily endorse the emphasis which the essayist has given to the importance of making the diagnosis clinically: and also thank him for the treatment other than intubation and anti-toxin which he has suggested.

"From the appearance of the throat the ordi-

nary practitioner makes the diagnosis, without aid of laboratory or microscope, so this point should be made prominent. The appearance of a membrane makes us suspicious. If it is adherent, or on wiping with cotton swab a part of it pulls off, leaving an oozy or bleeding surface underneath, the diagnosis is certain. I would give anti-toxin the first day of onset. Give it even in laryngeal cases where intubation is necessary, and believe in this way the mortality is reduced. Immunization doses to those exposed which should be done early—also most important. He reported three cases, one a child six weeks old, died on afternoon of first visit, with diphtheria developing in other members of family.

Dr. Poole made a few remarks on peri-tonsillar abscess, complimenting the essayist on the admirable manner in which he had covered the subject and offered his time and services in bacteriological work in cases of diphtheria, to the doctors of the association.

Dr. Dixon: While some authorities state that a peri-tonsillar abscess can be absorbed by local applications. I have never seen a case where the diagnosis was certain early enough to do so. Pus formed, the abscess should be open and pus evacuated, the patient is relieved and soon gets well.

As to diphtheria there is no question in my mind that it is caused by the Klebs-Löffler bacillus.

Except in laryngeal cases the diagnosis has not usually been difficult to me, but if in doubt I give the anti-toxin. It does no harm and may save the life of the patient.

After all the anti-toxin is the principal treatment though I have used Löffler's sol. inhalations, sublimation of calomel with a tent with perhaps some benefit.

Dr. Johnson: I don't believe in intubation at all, but prefer tracheotomy—and also believe in large doses of anti-toxin, give 2000 units first day—increasing 1000 units each day until the sixth day then give 6000 or 8000 units after which not much benefit will be secured.

Keep nose and throat clean, keep head down, and use strychnia which I consider sheet anchor in this disease.

Dr. Dunn, in closing: I agree with Dr. Johnson in giving large doses but would give as initial dose 4000 units and repeat as much and as often, as necessary to combat the formation of the toxins. The size of the dose depending on the virulence of the case and the amount of absorption.

Under the head of new business Dr. Dixon called attention to the encroachment of self-styled nurses, who have had little or no training upon the work of the professionally trained

nurse and asked the aid of the members in securing the passage of a bill by the next legislature requiring the registration of nurses and fixing qualifications for registration.

SILAS GRIFFIN, Secretary.

Henderson, May 28.

There is a projected movement to have introduced and passed, if possible, before the next session of the Legislature, a bill fixing the status of Trained Nurses and to establish a State Board of Registration for Nurses. The importance of this to all who have investigated the matter must be apparent and it is to be hoped that every member of the medical profession will lend his aid to secure the proper legislation.

It is a lamentable fact that in many communities nursing is now and has been for some time past, prosecuted in a most indifferent and slipshod manner. In my own city, and doubtless in many others the term "trained nurse" conveys no accurate idea of the professional standing of the individual. The young woman, who never crossed the portals of a hospital, or a training school for nurses, has in some way obtained a few months of instructions, perhaps from that most arrant of humbugs "a correspondent school," or the housemaid who is dissatisfied with her lot forthwith assumes the garb of the profession and calmly pockets the proceeds without fear of the consequences. It is no uncommon instance for those novices to demand and receive from fifteen to twenty dollars per week, while the so-called "monthly nurse" who bases her claims upon the fact that she has "had eight children herself," sits up and asserts herself by demanding from ten to fifteen dollars for the aid and consolation which her presence affords. It is most unfortunate that the sick should be at the mercy of the ignorant and mercenary attendant and it is most unfair that the latter should be able to enter into active competition with the trained nurse who has served a long apprenticeship in hospital and training school and is able to assume the many responsibilities of the work. After all these women cannot be so much to blame when they receive aid and encouragement from doctors who countenance their employment. While the services of the attendant who knows her limitations will always be in greater or less demand, the incompetent and officious self-styled nurse should be eliminated and the sooner the better for physician, patient and all others concerned. The same arguments which have secured the registration of physicians apply, in a degree, to the nursing profession and I hope to witness ere long, that recognition to which their training and capacity fully entitles them.

ARCH DIXON.

Jessamine—The Jessamine County Medical Society met at the office of Dr. Pentz, with President Welch in the chair. The following members were present:—Barnes, Welch, Mathews, Penick, Pearson, Pentz, and VanArsdall. Minutes of previous meeting were read and adopted. Dr. Fish reported that he was unable to be present to read paper. The Secretary read a paper on "Rational Therapy," urging the importance of accuracy in diagnosis and of giving drugs for results. The author protested against the use of so many proprietaries about which we know nothing. Dr. Pentz lead the discussion and urged that the members note carefully the results with the proprietaries and that the members should circulate "The Great American Fraud" among their patrons and friends. Dr. Penick believes that an accuracy of dosage with the single drug directed to the patient instead of the disease will accomplish more than so many combined drugs. Dr. Pearson thinks many of the young men are forced to use the proprietaries because the Medical Colleges do not teach the art of prescription writing and compounding of drugs as they should. Dr. Mathews is of the opinion that there is often as much in the management of a patient and in getting the confidence as in the therapeutics of the case. Dr. Barnes concurred with some of the members in the opinion that many of the proprietaries contained some of the older remedies in a palatable and efficient form. Dr. Welch dwelt on the importance of accuracy in diagnosis and the fact that the majority of diseases tend to recovery. Drs. Fish and Mathews to read papers at next meeting. The society adjourned to meet May 23rd.
J. A. VANARSDALL, Secretary.

Mason—The Mason County Medical Society met to-day with Dr. Pickett in the chair. J. H. Samuel read a very interesting and lengthy paper on therapeutics of Epsom salts.

Alex Hunter reported a very interesting case of diaphragmatic tic which had recently come before the Pension Board.

W. H. Taulbee read a paper on development of bacteriology from time of Varro to the present day.
W. H. TAULBEE, Secretary.

Oldham—The Oldham County Medical Society met April 25 in Pewee Valley at the residence of Dr. Eleanor A. Harthill, John H. Speer presiding.

Members present were:—J. H. Speer, Cassidy, Pryor, Harthill, and Caldwell.

The society had as guests J. Rowan Morrison, Philip Barbour, and August Schachner, of Louisville.

Dr. Pryor read a most excellent paper on an obscure case of abdominal tumor associated with

a profuse uterine hemorrhage, in which, after several days' ineffectual use of ergot he had controlled the hemorrhage by means of a few 3-4 grain doses of Styptol.

Dr. Cassidy took exception to repeated dram doses of ergot, saying that after two or three doses of this kind his best results were obtained by reducing the dose then to about twenty minims.

Dr. Morrison related a most interesting case of extra uterine pregnancy extending over a period of five years before the fetal remains were expelled through the abdominal wall.

The meeting was then adjourned for lunch.

After resuming business Dr. Barbour read a most interesting and instructive paper on the subject of Pertussis, making as a strong point the desirability of an early diagnosis before the disease had a strong hold upon the patient. In this regard he brought out the difference between an ordinary cough and a starting whooping-cough. In the ordinary cough the child as a rule makes only two or three expulsions of air before a deep inspiration whereas in the incipient Pertussis there are generally five or six such expirations before the inspiration. He also brought out the fact that in beginning Pertussis the cough is worse at night and liable to be periodical in its visitations.

In the treatment he strongly advised the use of Calcium Sulphide in 1-2 grain doses to saturation and syrup of ipecac or emetine to relieve distress by rendering the mucus less viscid.

Dr. Barbour showed several specimens of Calcium Sulphide and urged the importance of the doctor knowing whether or not the drug he was using had deteriorated, which it will quickly do if not well protected.

Dr. Cassidy.—This paper by Dr. Barbour has fully repaid me for my trip here. It is a subject of the utmost importance to me and a disease which in a very young infant, under one year, I find almost impossible to overcome. I very much like the use of quinine carried on for three or four days and then withdrawn for several days and repeated.

Dr. Speer.—I have listened with great interest to the paper. I find as the doctor suggests, great good from the use of syrup of ipecac to lessen the viscid mucus.

Dr. Schachner discussed the subject of Inguinal Hernia and, making use of a number of drawings, so clearly and lucidly outlined the position, structures involved and the treatment, as to call forth the most earnest attention and appreciation from his audience. He advised in most operative cases, instead of raising the cord up and placing it in front of the transversalis and into oblique which have been sutured to and behind Poupart's ligaments, leaving the cord be-

hind these structures and allowing it to emerge at the position of the external abdominal ring.

Dr. Morrison.—I believe that it is of great benefit to all of us to hear such a clear exposition of the subject of hernia as Dr. Schachner has given us. I would impress the fact that when traction is made in the reduction of a strangulation, it should be carefully applied and sometimes with the aid of hot wet blankets good results are obtained.

Dr. Speer.—I am particularly interested in the subject because recently I have had a case of strangulation which refused operation, but allowed a great deal of manipulation by a truss maker with fatal results.

Dr. Barbour.—In children I have obtained good results by the use of yarn trusses, never permitting the use of rigid steel band.

Dr. Schachner.—In many cases it is impossible to tell whether a patient is properly trussed or not, especially if the patient is fat and in many other cases the truss simply acts as a stopper, causing about itself an ever-increasing atrophy of the muscular structures, thus demanding an increasing size in this part of the truss. I would emphasize the fact that the majority of cases of strangulation upon which I operate occur in people who imagine they are properly trussed.

It was decided to make a valient effort to obtain as members all desirable practitioners in the county, to do this by having each meeting full of practical ideas and good papers, by stimulating good fellowship among our profession and thus by these high aims to make all see that it will be their own great loss intellectually, morally and professionally to longer refrain from lending their support and presence to these gatherings.

HERBERT CALDWELL, Secretary.

Pulaski—The Pulaski County Medical Society met in regular session April 11, 1907 in the office of Drs. Parker & Parker. The President, Dr. Allen, was in the chair, and the following members present:—J. S. Warren, Bohn, Reddish, Owens, A. W. Cain, Taylor, Griffin, Price, J. W. F. Parker, and S. F. Parker.

Upon call for clinical reports, Dr. Price presented to the society the histories of two cases of "complicated obstetrics"—placenta previa. These cases excited considerable discussion by various members, both interesting and instructive.

Dr. Cain reported a case of "Cancer" in a woman 47 years of age. Extensive involvement of cervix and surrounding area. Upon attempted or exploratory operation case proves "too bad to mend." The case brought forth quite a spirited discussion. Especially was the phase considered as to merits and demerits of

part played by menopause to disease—or disease to menopause.

J. W. F. Parker expressed probably the consensus of opinion when he put it as the positive and negative relation of disease—i. e., more deaths result from menopause negatively than positively.

Dr. Cain read an interesting and helpful paper on "Doctors' Differences, Their Causes and Cures." The subject was handled in every phase, and the paper met with hearty commendation and the author was roundly thanked and complimented. Then arose quite a heated and earnest discussion, of our "insurance stand" as to what constituted Old Line and what Industrial insurance. As to whether a member could do \$1,000.00 examinations for Commonwealth, and other so-called Industrial companies, and yet be within the bounds of our signed compact. Committee of Drs. Owens, Cain, and S. F. Parker appointed to investigate thoroughly.

Our members seem to stand as a unit strong on this question and the only difficulty appears to be to exactly understand what our boundaries are. Nothing further, the society adjourned.

May 13.—The Pulaski County Medical Society met with Drs. Parker & Parker for their regular monthly meeting Thursday, May 9th, Dr. Allen in the chair, and following members present:—Drs. Owens, Cain, Beante, Taylor, Bolin, S. F. Parker. Quite a general talk was engaged in concerning various interesting cases then under the observation of the respective members. None of our essayists coming up, we were forced to content ourselves with a splendid little meeting along free and informal talks.

Among other things a post-graduate course was mentioned. This was settled by a motion to form a "Doctors' Study Club," to meet with some member each Monday, 7:30 P. M., and some other member to lead the "study" with a selected subject, this leader to merely talk or lecture his views or practice on the particular line and then for those present to discuss and question at liberty. The object to have it as informal and sociable as possible and yet gain benefit therefrom. It was agreed that our first meeting should be with our president, Dr. Allen—on Monday, May 13th, Dr. A. W. Cain to preside as instructor on "Obstetric practice" and the host, Dr. Allen to provide material, to make it a smoky occasion, was also spoken of.

Then followed more insurance talk, and our society adjourned.

S. F. PARKER, Secretary.

Rowan—The regular meeting of the Rowan County Medical Society was held May 6, 1907.

A. Skagg read an excellent paper on the need of a law governing obstetrical practice in which he said many aggravating and sometimes

fatal cases were the result of ignorant, dirty midwives who are practicing in the country, with no qualification demanded of them; her chief recommendations are ignorance, filth and cheapness, her only armamentarium a bottle of ergot, and her boasted experience with over 500 cases.

The doctor can not condemn the old lady who is "catching babies" all around him for one, two and three dollars, if he does the old lady says he is trying to knock her out of the practice so he can get it. The people agree with her and the doctor loses the practice of all her friends.

A law should be enacted requiring any person practicing obstetrics to pass an examination of qualification and register.

The paper was fully discussed by W. W. Johnson and Wilson.

A. Skagg was appointed delegate to the next State Medical Society.

The subject for the next meeting will be "Patent Medicine Evil."

W. W. JOHNSON, Secretary.

Todd—Todd County Medical Society met at Trenton, May 1st, 1907. The forenoon was taken up with reports of clinical cases, no record on same owing to absence of the Secretary until afternoon session when minutes of previous meeting were read and adopted. First paper was read by E. W. Weathers on case and treatment of child during second summer, discussed by Drs. Gerver, E. M. Frey, Marshal, Escue and others — one of the most important subjects upon the profession—our first duty is to instruct the parents on the importance of prevention. Much easier to prevent than to cure. Milk should form the basis of all diet in all cases, especially bottle-fed children, to obtain same the cow should be healthy, well cared for and milked under as near sanitary conditions as possible; wash can and udder well and dry thoroughly; a wet udder much more dangerous than a dry one. The child should have plenty out-door exercise, fresh air and proper clothing—determine the relation between teething and the diseases so frequently seen in connection with it. We frequently attribute the trouble to dentition when the cause may be found elsewhere—though diarrhea and teething are so frequently associated it is difficult at times to differentiate between them.

Next paper read by B. E. Escue on "Typhoid Fever" which dealt principally with the prevention of this dreaded disease and careful attention to disinfecting all excrete from the patient. Screen your houses to keep out the flies—thinks all our closets should have waterproof vaults and same be kept thoroughly disinfected. Little was

said as to treatment. If we can prevent we will not need the treatment. This concluded the program for the day. Sherron Grove was selected as the next place of meeting with the following program: "Diagnosis and treatment of Hemorrhoids and Fissure," by R. L. Boyd. "Gastro Enteritis," E. M. Frey; "Gonorrhea and Its Complications," E. R. Marshal, including papers not read at previous meetings.

On motion the meeting adjourned to meet at Sherron Grove first Wednesday in June.

L. P. TRABUE, Secretary.

Warren—The regular meeting of the Warren County Medical Society was held in the Doctors' Club Room, May 8, at 1 P. M., with the president, W. C. Simmons, in the chair.

Owing to the inclement weather only one of the speakers was present. J. H. Souther read a paper on the "Prophylaxis of Typhoid Fever," which he said is really the most important part of the treatment of this disease.

Food, fingers and flies were the principle sources of infection, also contaminated water supply.

He felt that it was the duty of every doctor to protect the community by rigid orders of disinfection of the excreta and screen the patient. In the future the same war will be waged on flies as a germ carrier as at present is waged on the mosquito.

A. T. McCormack said that expense of typhoid fever, a preventable disease, was greater than the maintenance of the city, county and State government.

The only way it can be prevented is for every case to have the urine and stools disinfected for a long period of time as this is a distinct seed disease.

T. W. Stone said the greatest difficulty was in getting the family to realize the importance of thorough disinfection of the stools and to carry out the physician's orders.

In regard to treatment he used baths, regular feeding and preferred salol as an intestinal antiseptic.

E. N. Hall was rather guarded in making a diagnosis until the case fully developed. He gave supportive treatment but relied on the baths and nourishment.

W. C. Simmons spoke of the excellent garbage system Smith's Grove had enforced through the efforts of the physicians. We are sorry that our metropolis is still behind in this line, as it is essential to public health.

J. N. McCormack was with us again and gave an interesting account of medical organization of the various states he had visited and kindly praised the work of our own society.

L. H. SOUTH, Secretary.

Wolfe—At a meeting of Wolfe County Medical Society on May 6th, at Campton, the following officers were elected:

W. P. Wise, President,
J. R. Carroll, Vice President,
John L. Cox, Secretary and Treasurer.

BOOK REVIEWS.

Appleton's Medical Dictionary, an illustrated dictionary of medicine and allied subjects in which are given the derivation, accentuation and definition of terms used throughout the entire field of medical science, edited by Frank P. Foster, M. D., editor of the New York Medical Journal and Philadelphia Medical Journal. D. Appleton & Company, Publishers, \$10.00. This medical dictionary is intended especially for the general practitioner, and is an outcome of an extensive course of independent reading by the editor and his collaborators. While it has been kept down to the bulk of a single handy volume, there has been no attempt to save space by omitting details. The articles on individual diseases and those on surgical operations have also been made very full, all the new remedies in the pharmaceutical articles, proprietary as well as official, also titles of drugs and preparations recognized in United States, Germany, British pharmacopoeias are given fully.

The derivation of the words are given and in spelling this is adhered to. A pronouncing list of personal names in other languages than English, with a scheme for pronunciation, also a list of abbreviations and weights and measures at the end of the vocabulary.

The book is freely illustrated. The value of this dictionary depends upon its accuracy, convenience of arrangement and its comprehensiveness.

Every doctor and every county society needs the valuable aid of an up-to-date dictionary like this.

L. H. S.

Woman, a treatise on the normal and pathological emotion of feminine love, By Bernard S. Talmey. Flexible leather cover, \$3.00. Practitioners' Publishing Company, 62 W. 126th St., New York.

There is a great need for this medico-philosophical treatise, because it deals with the pathology of female sexual functions from a psychological point of view, a subject which is little known to the profession.

The opinions laid down in this treatise are based upon the experience of hundreds of writers, ancient and modern, poets, philosophers, historians and alienists have all been consulted and their opinions reported.

The first section gives briefly the anatomy of

the female sexual organs and accessories, also a short history of sex worship among the Chaldeans, Egyptians and Greeks.

Several chapters are devoted to the evolution of sex beginning with the Protozoa.

In one interesting chapter the author traces out the influence of sexual means upon the various Parisian styles and fashions.

In the pathology of sexual instincts a chapter is devoted to each anomaly as homosexual perversity, nymphomania, orgasmus Præcox and many others.

L. H. S.

Paraffin in Surgery. A critical and clinical study by Wm. H. Lockett, M. D., Attending Surgeon, Harlem Hospital, Surgeon to the Mt. Sinai Hospital Dispensary of New York and Frank I. Horne, M. D., Formerly Assistant Surgeon, Mt. Sinai Hospital Dispensary. 12 mo.; 38 Illustrations; 118 Pages. Surgery Publishing Co., 92 William Street, N. Y. City. Cloth \$2.00.

This book covers a special field in surgery of absorbing interest both to the surgeon and general practitioner. The research and original investigations made by these authors in the use of Paraffin have exploded many fallacies previously maintained. It presents the Chemistry of Paraffin, the Early Disposition of Paraffin in the Tissues, Physical state of the Paraffin bearing on its Disposition, the Ultimate Disposition of Paraffin, Technic and Armamentarium. It thoroughly covers the use Paraffin in cosmetic work such as Saddle Nose Deformity, Depressed Scars, Hemiatrophia Facialis with a large number of photographs showing cases before and after operation, with illustrations of micro-photographs of the Disposition of the Paraffin in the Tissues. It also presents other conditions of a functional character, where Paraffin can be used with service such as Inconsistency of Urin, Umbilical, Hernia, Umbilical and Ventral Hernia, Epigastric Hernia, Inguinal Hernia, etc. The subject is presented in a scientific yet comprehensive manner.

Full details are given as to the method of Preparing the Paraffin as well as the method and manner in which it should be injected. This book presents a wide field for the use of Paraffin and a copy should be in every physician's library. It is printed upon heavy coated book paper and attractively bound in the best quality of leather and cloth, stamped in gold. Price \$2.00.

Peterson's Obstetrics. The Practice of Obstetrics. By Eminent Authorities. Edited by Reuben Peterson, A. B., M. D., Professor of Obstetrics and Diseases of Women in the University of Michigan, Department of Medicine and

Surgery, Ann Arbor, Mich. Large octavo, about 1087 pages, with 523 engravings and 30 full-page plates in colors and monochrome. Cloth, \$6.00, net; leather, \$7.00, net; half morocco, \$8.00, net. Lea Brothers & Co., Philadelphia and New York, 1907.

This work is composed of contributions from ten eminent obstetricians and gynaecologists. The first section by Carl Huber gives the physiology and development of the ovum with many plates and diagrammatic drawings. The preceding sections on physiology of pregnancy, labor and puerperium is well written in many details, the illustrations are numerous and are produced from original photographs taken from life. The author evidently had unusual facilities at his command which render it possible to secure such a fine collection representing many pathological as well as normal conditions.

The nomenclature of positions and presentations are confusing, the practitioner regrets to have to learn each author's method of naming. There should be one standard.

The interesting chapter on forceps begins with a history of the Chamberlin instruments and traces the development of that instrument down to the modern axistraction.

The method of each different application is given clearly and each step is illustrated by photographs.

The author says that in pulling the muscles of the arm only should be used, bracing the feet and bringing into play the back muscles is unjustifiable. The section on forceps adds greatly to the value of the book to the practitioner, for adequate knowledge of the use and abuse of forceps would save many women from invalidism and even death.

The last section is devoted to the physiology and pathology of the new born infant.

L. H. S.

A Treatise on Orthopedic Surgery, By Royal Whitman, M. D., Clinical Lecturer and Instructor in Orthopedic Surgery in the College of Physicians and Surgeons, New York; Associate Surgeon to the Hospital for the Ruptured and Crippled, etc. Third Edition, revised. Octavo; 871 pages; 554 illustrations. Philadelphia and New York: Lea Brothers & Co., 1907. Price, \$5.50, net.

A good book on Orthopedic Surgery is most valuable of all medical literature to the family physicians because he has the first opportunity and who is thereby under the highest obligation, to detect, prevent, or cure such defects, or to recognize them when they must be referred to a specialist.

The author has endeavored in this work through illustrations, diagrams and X-ray pic-

tures to make each deformity easily recognized and treated by the practitioner. The first four chapters are devoted to tubercular diseases of the spine and other deformities with special reference to the pathological changes and early symptoms.

Diseases of the bones and joints are given with pictures of braces, and mechanical apparatus. One chapter is devoted to Bier's treatment of affections of the joints by active and passive congestion. The application of the hot air box and the method of applying the bandages is illustrated in connection with this treatment.

The text is abreast of modern teachings in orthopedic therapeutics, remedial and, what is especially of interest to the general practitioner, prophylactic.

L. H. S.

A Text-Book upon the Pathogenic Bacteria. For Students of Medicine and Physicians. By Joseph McFarland, M. D., Professor of Pathology and Bacteriology in the Medico-Chirurgical College, Philadelphia. New (5th) Edition. Octavo volume of 647 pages, fully illustrated, a number in colors. Philadelphia and London: W. B. Saunders Company, 1906. Cloth, \$3.50 net.

The opening chapters are devoted to the full history and evolution of bacteriology.

Several sections are devoted to methods of infection and immunity, the lateral chain theory is clearly explained with many illustrations.

Each pathogenic bacteria is described in reference to the morphology, staining and cultivation, also their toxins and lesions, thus making this a valuable book for the student and practitioner who graduated before modern science had thrown light upon etiology of diseases.

The author gives various methods of preparing culture medium and also the detail account of the Widal reaction.

The reproductions are mainly taken from the great standards.

L. H. S.

COUNCIL OF PHARMACY.

CHINAPHENIN.

(Chinaphenin, $\text{CO}(\text{NH} \cdot \text{C}_6\text{H}_4\text{OC}_2\text{H}_5)(\text{C}_{20}\text{H}_{23}\text{N}_2\text{O}_2) = \text{C}_{39}\text{H}_{33}\text{N}_3\text{O}_4$, the quinine carbonic acid ester of phenetidin.

Actions and Uses.—Chinaphenin combines the antiperiodic properties of quinine with the analgesic power of phenacetin, with the advantage of tastelessness and asserted freedom from symptoms of cinchonism produced by the administration of the two remedies in simple mixture. It is recommended in febrile diseases, especially la grippe; in spasmodic conditions, such as whooping-cough; in certain forms of malaria and in neural-

gia. Dosage.—Adult: 0.3 to 0.6 Gm. (5 to 10 grains) ordinarily, 1.5 to 2 Gm. (22 to 30 grains), given in two doses as an antipyretic in neuralgia and malaria; in whooping-cough. 0.13 to 0.3 Gm. (2 to 5 grains), according to age. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York).

CHLORBUTANOL.

Chlorbutanol, 1,1,1-trichlor-2-methyl-propan-2-ol, $\text{CCl}_3\text{C}(\text{OH})(\text{CH}_3)\text{CH}_3 = \text{C}_4\text{H}_7\text{OCl}_3$, produced by the reaction of acetone on chloroform.

Actions and Uses.—It is said to be absorbed unchanged, but to be decomposed in the body. It is a local anesthetic with an action weaker than that of cocaine, but sufficient to prevent vomiting from gastric irritation. Its antiseptic action is said to be fifteen times as strong as that of boric acid. It acts on the central nervous system similarly to chloral, and although the claim has been made that hypnotic doses are without effect on the circulation and respiration, independent observers have described a fall of blood pressure and interference with respiration in animals, and consider it fully as dangerous as chloral. In man 100 grains caused severe symptoms, but recovery occurred. It is claimed that no habit is induced, but this may be referable to its restricted employment. It is recommended as a mild local anesthetic, in dentistry, etc., as a preservative for hypodermic solutions, for insomnia, vomiting and for spasmodic conditions. It is also said to be useful as introductory to general anesthesia, lessening excitement and nausea. Dosage.—The dose is from 0.3 to 1.5 Gm. (5 to 20 grains) dry or in capsules. Hypodermically as a local anesthetic a saturated aqueous solution may be used.

CHLORETONE.

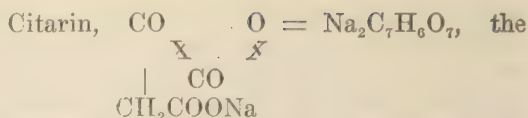
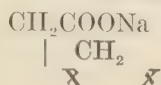
A name applied to chlorbutanol, which see. Manufactured by Parke, Davis & Co., Detroit, Mich.

CHLORETONE INHALANT.

A solution of chloretone, camphor, menthol and oil of cinnamon in liquid petrolatum.

Actions and Uses.—An anodyne, antiseptic, and emolient solution for use by inhalation as a very fine spray or nebula. Manufactured by Parke, Davis & Co., Detroit, Mich.

CITARIN.



Normal sodium salt of anhydromethylene-citric acid.

Actions and Uses.—This is one of the compounds which it is claimed increase the elimination of uric acid by forming very soluble compounds with that substance. It has been recommended for gout and chronic rheumatism. Dosage.—1 to 2 Gm. (15 to 30 grains), largely diluted with water. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York).

CREOSOTAL.

A mixture of carbonic acid esters, analogous to guaiacol carbonate, prepared from creosote.

Action and Uses.—Creosotal has the same action as creosote, but is claimed to be non-toxic and devoid of irritant properties. It is recommended as a substitute for creosote for internal exhibition in tuberculosis, pneumonia and as an intestinal antiseptic. Dosage.—From 0.3 to 2.0 Gm. (5 to 30 grains) for children, to 1 to 4 Gm. (15 to 60 grains) for adults in milk, coffee, wine, cod-liver oil or emulsion. Externally it may be applied undiluted. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York). Fabrik von Heyden, Radebeul, near Dresden.

DENTALONE.

A 30 per cent. solution of chloretone in a mixture of oils of gaultheria, cloves and cassia.

Actions and Uses.—Dentalone possesses pronounced anesthetic properties and is intended for use by dentists in the treatment of exposed nerves in decayed teeth. Prepared by Parke, Davis & Co., Detroit, Mich.

DERMATOL.

A name applied to Bismuthi Subgallas, U. S. P. Manufactured by Meister, Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

DIONIN.

Dionin, $\text{C}_{17}\text{H}_{17}\text{NO}(\text{OH})(\text{OC}_2\text{H}_5)\text{HCl} + \text{H}_2\text{O} = (\text{C}_{19}\text{H}_{24}\text{O}_3\text{ClN} + \text{H}_2\text{O})$, the hydrochloride of the ethyl ester of morphine.

Actions and Uses.—It is claimed that this compound acts like morphine without producing constipation, nausea or lassitude. It is the conclusion of some good observers that it possesses no advantages over codeine. Ap-

plied to the eye, it causes a local vasodilation, leading to acute conjunctival edema. Dionin is recommended to relieve pain, especially in respiratory affections, as an antispasmodic in whooping-cough, for insomnia and externally in the treatment of corneal affections, conjunctivitis, iritis, etc. Dosage.—0.015 to 0.06 Gm. ($\frac{1}{4}$ to 1 grain). Externally it is applied in 10 to 20 per cent. solution. Manufactured by E. Merck, Darmstadt. (Merck & Co., New York.)

SULPHO-LYTHIN.

Abstract from the report of the Council on Pharmacy and Chemistry of the American Medical Association (*Journal A. M. A.*, Dec. 8, 1906, page 1930):

The following report was submitted to the Council by the subcommittee which examined Sulpho-Lythin:

To the Council on Pharmacy and Chemistry:—The following report on Sulpho-Lythin is herewith submitted:

Sulpho-Lythin is sold by the Laine Chemical Company, New York. In the literature sent to physicians it is said: "This product, the sulpho-phosphate of sodium and lithium (non-effervescent) is entirely new and is unique in its action."

Chemical analysis of a specimen of Sulpho-Lythin purchased in the open market, indicated its composition to be:

Sodium sulphate, anhydrous	10.51
Disodium hydrogen phosphate, anhydrous	56.67
Sodium thiosulphate, anhydrous	20.78
Sodium chlorid	5.98
Lithium, as citrate	3.12
Sulphur, free	0.16
Moisture	1.53
Loss	1.25

The examination, therefore, shows that Sulpho-Lythin is a mixture consisting mainly of sodium sulphate, sodium phosphate, and sodium thiosulphate. The statement that it is a "sulpho-phosphite of sodium and lithium," therefore, is not correct, and a statement that "it is entirely new and is unique in its action" appears unwarranted and misleading. It is, therefore, recommended that the preparation be refused recognition. It is also recommended that an article be prepared for publication calling attention to the exaggerated claims made for Sulpho-Lythin.

The recommendations of the subcommittee were adopted by the Council, and in accordance therewith the report is published, with the following comments.

W. A. PUCKNER, *Secretary.*

According to the above analysis, this wonderful new remedy, "which surgeons of this city (New York) have used . . . after lap-

arotomies . . . with excellent results" is simply a mixture of well-known salts obtainable in any drug store, and which any third-year student knows how to prescribe and even to compound.

Examination and analysis of various specimens of this product demonstrated that its composition is not always the same. Thus analysis of one specimen indicated only 5.12 per cent of anhydrous sodium sulphate instead of more than 10 per cent. in the first specimen; also this specimen contained 10.45 per cent. of water instead of 1.53 per cent. Apparently, therefore, the manufacturers are incompetent to prepare a product of constant composition. One chemist calls attention to the fact that different portions taken from the same bottle differed widely in composition. The following is taken from his report:

The analysis shows Sulpho-Lythin is not a definite chemical compound, but a mixture of sodium phosphate and some compound of lithium. That it is only a mixture is shown by the fact that in the examination for thiosulphate when the substance was thoroughly examined without first being thoroughly mixed, results were obtained varying from approximately 27 per cent. in the first portions taken from a bottle, to 42 per cent. in the last portions of the same bottle.

WONDERFUL VIRTUES OF THE NEW COMPOUND.

According to one circular, this simple mixture of salts is a great remedy for:

Disorders of the Liver, Inflammation of the Gall Bladder and Bile Ducts. Acute Congestion of the Liver, Gall Stones, Intestinal Indigestion, Chronic Constipation, Rheumatic and Gouty Conditions, Diabetes, Nephritis, Acute or Chronic, Bright's Disease, Genito-Urinary Diseases, Miasmatic (Malarial) Fevers, Skin Eruptions, Corpulency or Obesity, Convalescence from Alcoholism and the Treatment of Drug Habits.

In another circular we read:

"It is not itself a cathartic or even a laxative, but catharsis results from its administration because of the bile that is poured out into the intestinal tract, and the sulphur liberated by its decomposition."

Wonderful chemistry that is able to remove the laxative quality from Glauber's salts!

"Sulpho-Lythin is absorbed and passes into the circulation, where it exerts an antifermentative and antitoxic action, restoring and preserving normal alkalinity of the blood and preventing or counteracting septic processes throughout the body. It is also a solvent for uric acid.

Thus the great puzzle of an internal antiseptic is solved and that which generations of pharmacologists have failed to find is discovered by an ingenious layman, who now

imparts his discovery to the medical profession at so much per bottle. Does he suppose that intelligent physicians still entertain the notion that anything that contains a grain or two of lithium to the dose will act internally as a uric acid solvent?

"Sulpho-Lythin acts also on the skin, stimulating the perspiratory glands and removing dislocations and eruptions on its surface."

Our amateur pharmacologist has probably applied his knowledge of amateur photography to therapeutics and uses "hypo" to remove eruptions as well as stains.

NOT ADVERTISED TO THE PUBLIC.

This nostrum is not advertised to the public. Oh no! It is put up solely for physicians' use (*sic*). But the physician is repeatedly advised in the advertisements to "order always an original (6 ounce) bottle to prevent substitution."

If any apology is necessary for devoting so much space to such an insignificant nostrum it is found in the fact that Sulpho-Lythin is supported by testimonials from physicians of influence and standing, and is advertised in medical journals supported in part by educated and thoughtful members of the medical profession. It is also a sample of hundreds of other so-called "ethical proprietaries" which are made or sold by men who have absolutely no knowledge of the drugs or of medicine, but who presume to advise physicians how to treat their patients. If these preparations are to be used some control to insure their constancy of composition and the good quality of their ingredients is essential, and it is evident that the Council on Pharmacy and Chemistry was created none too soon to fulfill the important mission.

URON AND THIALION.

Abstract from the report of the Council on Pharmacy and Chemistry of the American Medical Association (*Journal A. M. A.*, Nov. 3, 1906, p. 1500).

The following reports were submitted to the Council by the subcommittees which examined Uron (Uron Chemical Company) and Thialion (Vass Chemical Company):

To the Council on Pharmacy and Chemistry: The following report on Uron is herewith submitted: Uron is sold by the "Uron Chemical Co., Box A, St. Louis, Mo." In the literature distributed to physicians and in advertisements appearing in current medical journals $\text{LiC}_{13}\text{H}_7\text{N}_4\text{O}_2$ is given as the chemical formula of Uron.

According to analyses, this article is not a chemical compound, but is a mixture of

lithium benzoate and hexamethylenamin in appropriately the following proportions: Lithium benzoate 58 per cent. Hexamethylenamin 42 per cent.

It is recommended that Uron be refused recognition and that its report be published.

To the Council on Pharmacy and Chemistry: We beg leave to report on Thialion as follows: Thialion is sold by the Vass Chemical Co., Danbury, Conn. In the literature supplied to physicians and in the advertisements in medical journals Thialion is stated to be a "laxative salt of lithia" with the chemical formula " $3\text{Li}_2\text{O} \cdot \text{NoO} \cdot \text{SO}_3 \cdot 7\text{HO}$ " "Sodio-trilithic anhydrosulphate" is given as a synonym. An elaborate graphic or structural formula is also given.

According to analyses, this preparation is a mixture consisting chiefly of sodium sulphate and sodium citrate, with very small amounts of lithium, the average of several estimations indicating the following composition:

Sodium citrate	58.6
Sodium sulphate, anhydrous	26.6
Sodium chlorid	3.3
Lithium citrate, anhydrous	1.8
Water	9.7

Thus, the advertising literature is a deliberate misrepresentation of the facts. It is, therefore, recommended that the preparation be refused recognition, and that this report be published.

The recommendations of the subcommittees were adopted by the Council, and in accordance therewith the above reports are published.

W. A. PUCKNER, *Secretary.*

In publishing the above report the Council is presenting to the medical profession another object lesson, and one that illustrates how easily our profession is being humbugged. Many of the scientific chemical compounds and derivatives given us by the German chemists have been distinct advancements. It is not strange that imitators should appear, and antikamnia, Ammonal, Phenalgin, Salacatin, and now Uron, Thialion are foisted on the profession. We are told, and many believe that these wonderful compounds, by the mysterious union of their ingredients, possess therapeutic properties different from, or more powerful for good than, the drugs from which they are made.

There is another factor worth noting connected with this subject: When to the claim that the mixture is a "chemical compound" is added a complete chemical formula, it prevents the impertinent question, "What is it?"

For isn't the "formula" there, and is not the information given without the asking? Most of us have been so overcome by the display of the chemical knowledge of the nostrum maker that we have been afraid to expose our ignorance by asking for information or explanation. And thus the promoter avoids perplexing questions, which, if answered truthfully, would spell bankruptcy.

The Uron Chemical Company informs us, concerning Uron, that it has the chemical formula of $\text{LiC}_{13}\text{H}_7\text{N}_4\text{O}_2$. Now this formula looks very dignified and scientific to those who are not up in chemistry. To the chemist, however, the formula signifies nothing. A few simple tests reveal the composition of the mixture, and it is surmised that the "formula" is the result of an attempt to combine the formulas of two ingredients, i. e., $\text{LiC}_7\text{H}_5\text{O}_2$ and $\text{C}_6\text{H}_{12}\text{N}_4$, the addition being faulty.

In regard to Thialion, the formula, furnished by the Vass Chemical Company is even worse. To a physician who possesses but little knowledge of chemistry it will seem impressive, and he may absorb the idea that it stands for a preparation that is the result of exhaustive scientific research. To the chemist this formula will appear as a jumble of symbols and numbers that mean nothing.

While there is a ridiculous side to this business, there is also a serious one. Those who have been making money out of us undoubtedly laugh in their sleeves at our gullibility, but to us as members of a presumably learned and intelligent profession, it is not a laughing matter. The whole nostrum business is a shame and a disgrace.

VIN MARIANI.

According to a report of a committee of the Council on Pharmacy and Chemistry, published in the *Journal of the American Medical Association*, Nov. 24, 1906, "Vin Mariani" is a preparation of red wine, apparently imported from Bordeaux, and fortified, in this country, by an alcoholic preparation of coca leaves or other parts of the coca plant. An analysis of the imported wine showed its alcoholic strength to be 10 per cent. by volume, while that of the Vin Mariani as bought in the open market was 16.15 per cent. The finished sample showed also 0.025 per cent. of alkaloids (coca bases). It appears that the increased alcoholic strength of Vin Mariani over the Bordeaux wine from which it is made as shown by the analysis, doubtless comes from the alcoholic extract containing the coca bases. Approximately 6 per cent. of sugar is also added to the wine. Judging from the analysis, therefore, Vin Mariani corresponds to a mixture of an alcoholic

preparation of coca leaves and ordinary Bordeaux red wine, with the addition of about 6 per cent. of sugar.

This preparation is in conflict with rule 5 of the Council on account of misrepresentation in implying that the preparation made in this country is imported and is guaranteed as pure and unadulterated by the United States Government. It also conflicts with rule 6 by the exaggerated and misleading statements as to therapeutic value. The firm's letter-heads have printed on them the following:

"Vin Mariani purifies the blood stream, strengthens the circulation, stimulates muscular fiber and nerve tissue, is a respiratory stimulant, strengthens the heart muscles, and is an emergency food in the absence of all other nutriment. Successfully employed as an adjuvant in anemia, debility, diseases of the chest, nervous troubles, muscular or mental overstrain, neurasthenia and allied conditions, and in certain cases of protracted convalescence."

The committee believes that Vin Mariani is intended as a beverage rather than as a medicine. The report concludes:

"The committee recommends, therefore, that Vin Mariani be refused recognition and that this report be published in full or in part."

The facts are that Vin Mariani is made in this country, but the proprietors endeavor to create the impression that it is a French preparation. It is no longer advertised directly to the laity, but the same object is attained by the circulars around the original bottle prescribed by the physician. Testimonials from eminent foreigners accompany the medicines, while the testimonials of eminent Americans are used on the other side of the Atlantic. Is it possible that the testimonials are fakes? The circulars are calculated to lead the layman to conclude that the remedy is a cure-all.

Can we blame the layman for using Peruna, Wine of Cardui, etc., simply because they are advertised, when there are physicians who, for the same reason, prescribe concoctions that are just as quackish and just as useless. And can editors of medical journals consistently find fault with newspapers for carrying advertisements of fraudulent "patent medicines" when they themselves admit to their pages advertisements of nostrums that are no less fraudulent and of no more value?

DIURETIN.

A name applied to theobromine-sodium, saccharate, which see. Manufactured by Knoll & Co., Ludwigshafen, Germany (E. Merck & Co., New York).

DUOTAL.

A name applied to Guaiacolis Carbonas, U. S. P. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York).

DUOTONOL.

A name applied to a mixture of equal parts of calcium tonol and sodium tonol. (See Tonols.)

Actions and Uses and Dosage.—See Glycerophosphates. Manufactured by Chemische Fabrik auf Actien, vorm E. Schering, Berlin (Schering & Glatz, New York).

ELIXIR EUPNEIN.

A preparation said to contain in each dose of 8 Cc. (2 fluidrams): heroin 0.0026 Gm. (1-24 grain), terpin hydrate 0.13 Gm. (2 grains), creosote 0.3 Gm. (5 grains), in a menstrum containing 30 per cent. of alcohol with glycerin and aromatic essential oils.

Actions and Uses.—From its composition it appears to be well adapted to use in chronic cough from bronchitis, etc. Dosage.—4 to 12 Cc. (1 to 3 fluidrams). Prepared by Schieffelin & Co., New York.

ELIXIR SAW PALMETTO.

An elixir of saw palmetto berries, sandal wood and cornsilk.

Actions and Uses.—The constituents of this preparation are credited with diuretic properties and believed to be sedative to the genitourinary tract and to exert a curative action on the inflamed mucous membrane, especially in chronic cases. Dosage.—4 to 16 Cc. (1 to 4 fluidrams) three times a day. Prepared by Parke, Davis & Co., Detroit, Mich.

LEMPYROFORM.

A condensation product of birch tar and formaldehyde.

Actions and Uses.—Empyroform is an antipruritic, sedative and desiccant. It is said to be superior to tar and free from irritant or toxic effects. It is claimed to be useful in all stages of eczema, psoriasis, lichen, urticaria, prurigo, pityriasis, etc. Dosage.—It is applied as a 5 to 10 per cent. ointment, 10 to 20 per cent. zinc paste, 10 to 20 per cent. tincture, and 37.5 per cent. suspension. Manufactured by Chemische Fabrik auf Actien, vorm. E. Schering, Berlin (Schering & Glatz, New York).

EUCALOIDS.

Gelatine capsules, each containing 0.3 Cc.

(5 minims) of pure oil of eucalyptus.

Dosage.—1 to 2 globules three or four times a day. Prepared by Edward G. Binz, Los Angeles, Cal.

EUCAMUL.

An emulsion of oil of eucalyptus in glycerin and honey, containing 0.13 Cc. (2 minims) of the eucalyptus oil in 4 Cc. (P fluidram).

Dosage.—2 to 4 Cc. (1-2 to 1 fluidram), as needed. Prepared by Edward G. Binz, Los Angeles, Cal.

EUGALLOL.

A solution consisting of two parts of mon-acetylpyrogallol, $C_6H_3(OH)_2(CH_3COO)$, and one part of acetone.

Actions and Uses.—Eugallol acts as an energetic substitute for pyrogallol, but is liable to produce local irritation when applied to the skin. Dosage.—It is applied pure by penciling once a day, covering the painted part with powdered zinc oxide, suspending the application a few days if it is followed by irritation. Manufactured by Knoll & Co., Ludwigshafen a. Rh. and New York.

EUMYDRIN.

Eumydrin $C_6H_5(NHCH_2CH_2CO_2C_7H_{11}N)(CH_3)_2NO_3 = C_{18}H_{27}O_6N_2$, the nitrate of methylated atropine.

Actions and Uses.—Eumydrin is a mydriatic and antihydrotic, replacing atropine sulphate both internally and externally in corresponding doses. It is claimed that it dilates the pupil more rapidly than atrophine and the dilatation is of shorter duration—being intermediate in these respects between atrophine and homatropine. It is said to be much less toxic than atropine, so that larger doses may be given to secure the effect. It is particularly recommended for the treatment of night sweats, whooping cough and the relief of enuresis. Dosage.—Internally as an antihydrotic, 0.001 to 0.0025 Gm. (1-60 to 1-24 grain). Externally as mydriatic, in solutions about one-tenth stronger than the usual atropine solutions. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York).

EUPHORIN.

Euphorin, $CO(HN.C_6H_5)(OC_2H_5)=C_6H_5O_2N$, a compound closely allied to Aethylis Carbaras, U. S. P. (urethane) and differing from this by the replacement of the group NH_2 by NHC_6H_5 .

Actions and Uses.—Euphorin is anodyne, antipyretic and antiseptic. It is recommended in rheumatism, sciatica, headache, etc. Externally it is recommended to be applied as a dusting powder in venereal and skin diseases, ulcers, burns, etc. Dosage.—0.5 to 1 Bm.

(8 to 15 grains) dissolved in wine or suspended in water; externally in powder, in lanolin ointment and in superfatted soap. Manufactured by Fabrik von Heyden, Radebeul near Dresden.

EUPHTHALMIN.

Euphthalmin, $C_{17}H_{25}NO_3 \cdot HCl$ a mandelic acid derivative of beta-eucaine.

Actions and Uses.—Euphthalmin produces prompt mydriasis free from anesthetic action, pain, corneal irritation, or rise in arterial tension. It has little or no effect on accommodation, and this disappears more rapidly than with atropine, cocaine, homatropine, etc. In its effects on the general system, euphthalmin very closely resembles atropine. **Dosage.**—2 to 3 drops of a 5 to 10 per cent. solution, according to age of the patient and the nature of the case, are instilled into the eye. Manufactured by Chemische Fabrik auf Actien, vorm. E. Schering, Berlin (Schering & Glatz, New York).

EUQUININE.

Equinine, $C_2H_5O.CO.OC_{20}H_{23}N_2 = C_{23}H_{28}O_4N_2$, quinine ethyl carbonic acid ester.

Actions and Uses.—Equinine is claimed to have the same action as quinine, with the advantage of being tasteless, owing to its insolubility in water and alkaline media. **Dosage.**—The same as quinine. Manufactured by Vereinigte Chininfabriken, Zimmer & Co., Frankfort a. M. (Merck & Co., New York).

EUROSOL.

Eurosol, $C_6H_4(OH)CH_3COO = C_8H_8O_3$, an acetic acid ester of resorcinol (1,3-phen-diol).

Actions and Uses.—Its action is similar to that of resorcinol, but milder and more lasting because of the gradual liberation of the phenol. **Dosage.**—It is applied in 5 to 20 per cent. ointments and in acetone solution. Manufactured by Knoll & Co., Ludwigshafen a. Rh. and New York.

EURESOL SOAP.

A soft soap supplied in tubes, containing euresol, eucalyptol and oil of turpentine. Prepared by Knoll & Co., Ludwigshafen and New York.

EUROPHEN.

Europhen, $C_6H_3(C_4H_9)(CH_3)(OH).C_6H_2(CH_3)(:O)(C_4H_9) = C_{22}H_{29}O_2I$, a condensation product of molecules of isobutylorthocresol, with 1 atom of iodine, analogous to Thymolis Iodidum, S. S. P.

Actions and Uses.—Its action is similar to that of iodoform and thymol iodide. It is claimed especially to be useful in the treatment of venereal ulcerations. **Dosage.**—Europhen may be given internally in the form

of pills in doses of from 0.2 to 0.3 Gm. (3 to 5 grains). Locally it may be used as a dusting powder in substance or mixed with an equal quantity of finely powdered boric acid, as an ointment, with wool fat (lanolin), or as a 5 per cent. embrocation, dissolved in olive oil. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York).

FERRICHTHYOL.

A derivative of Ichthyol in which about 2.5 per cent. of iron is contained.

Actions and Uses.—It is said to be alterative, antiseptic, hematinic and tonic. It is recommended in anemia, chlorosis, etc. **Dosage.**—1 to 2 Gm. (15 to 30 grains) in tablets. Manufactured by the Ichthyol Co., Hamburg (Merck & Co., New York).

FERRIPYRINE.

A name applied to a product identical with Ferropyrine, which see. Manufactured by Farbwerke, vorm. Meister, Lucius & Bruening, Höchst a. M. (Victor Koechl & Co., New York).

FERROPYRINE.

Ferropyrine, $(C_{11}H_{12}N_2O)_3 \cdot (FeCl_3)_2$, a compound of antipyrine and ferric chloride, containing about 36 per cent. of ferric chloride and 64 per cent. of antipyrine. **Actions and Uses.**—It is hematinic, hemostatic astringent, analgesic and tonic. Its styptic action is pronounced and said not to be accompanied by irritant effects. According to Fraenkel, it combines with its hemostatic properties the injuries by actions which limit the application of ferric chloride as a hemostatic. **Dosage.**—0.3 to 1 Gm. (5 to 15 grains) in powder, with sugar and peppermint, or in solution. Externally 1 to 15 per cent. solution as injection, to 20 per cent. solution or pure or hemorrhages. Manufactured by Knoll & Co., Ludwigshafen.

FORMALIN.

A name applied to Liquor Formaldehydi, U. S. P. Manufactured by Chemische Fabrik auf Actien, vorm. E. Schering, Berlin. (Schering & Glatz, New York).

FORMIN.

A name applied to Hexamethylenamina, U. S. P. Manufactured by E. Merck, Darmstadt. (Merck & Co., New York).

GALLOGEN.

$$\begin{array}{c} C_6H(OH)_2 \\ \diagup \quad \diagdown \\ \text{Gallogen, } CO \mid O \\ \diagdown \quad \diagup \\ C_6(OH)_2COOH \end{array} = C_{12}H_6O_8, \text{ an} \\ \text{hydrous ellagic acid prepared from Divi-divi,}$$

the pods of *Cæsalpina coriaria*, containing more than 50 per cent. of tannin.

Actions and Uses.—Gallogen is an astringent and antidiarrheic, slowly decomposed in the intestinal tract, thus exerting its astringent action gradually during its passage. It has been recommended in dysentery, cholera infantum, diarrhoea, and is said to be useful even in those of syphilitic or tuberculous origin. Dosage.—0.3 to 0.5 Gm. (5 to 8 grains) for children; 0.6 to 1 Gm. (10 to 15 grains) for adults, suspended in neutral or slightly acid media. Manufactured by Ad. Heinemann, Eberswalde (C. Bischoff & Co., New York).

GERMICIDAL SOAP.

A solid product containing 2 per cent. of mercuric iodide in combination with hard soap

Actions and Uses.—It is claimed to be a disinfectant which does not coagulate albumin nor corrode steel or nickel. It is recommended for the disinfection of the hands and for washing out infected cavities. Dosage.—Applied externally, dissolved in water. A mild form is also prepared containing 1 per cent. of mercuric iodide; also a soft soap containing 1 per cent. of mercuric iodide. Prepared by Parke, Davis & Co., Detroit, Mich.

GLUTOL-SCHLEICH.

A chemical combination of gelatin and formaldehyde.

Actions and Uses.—It is claimed that while in itself non-aseptic, non-irritant and non-toxic, it becomes antiseptic and bactericidal in contact with living cells in consequence of the elimination of nascent formaldehyde, which is split off very slowly, but steadily. Dosage.—It is employed undiluted as a dusting powder, etc. Manufactured by Chemische Fabrik auf Actien, vorm. E. Schering, Berlin (Schering & Glatz, New York.)

GLYCERIN EMOLLIENT.

A mixture containing: Oil of gaultheria, 2 Gm. (30 grains), boric acid, 23 Gm. ($\frac{3}{4}$ ounce), corn starch, 88 Gm. (3 ounces), glycerin, 885 Gm. (28.5 ounces), tragacanth, 17 Gm. (263 grains).

Actions and Uses.—It is intended for use as lubricant in gynecologic and surgical practice. Dosage.—It is put up in collapsible tubes and is to be applied to the dry skin. After use it can be washed off in a stream of water. Prepared by Parke, Davis & Co., Detroit, Mich.

GLYCEROPHOSPHATES.

The salts of glycerophosphoric acid, $H_2(CH_2OH.CHOH.CH_2)PO_4$; usually the two remaining hydrogen atoms of phosphoric acid are replaced by the base; $Na_2CH_2OH.CHOH.CH_2)PO_4$.

Actions and Uses.—These salts were introduced as "nerve foods" and tonics on the theory that their phosphorous, being a step nearer lecithin, is assimilated more readily than that of hypophosphites. Neither the experimental nor the clinical evidence is considered conclusive by all authorities. Dosage.—The potassium and sodium salts may be given hypodermically 0.2 to 0.25 Gm. (3 to 4 grains) in normal saline solution, or *per os* 0.25 to 0.65 Gm. (4 to 10 grains) in water or syrup. The calcium, iron, lithium, magnesium and manganese salts 0.2 to 0.65 Gm. (3 to 10 grains) doses, preferably in the form of tablets; the quinin salt in 0.1 to 0.33 Gm. ($\frac{1}{2}$ to 5 grains), and the strychnine salt in 0.001 to 0.003 Gm. (1-60 to 1-20 grain) doses.

GUAIACOL-SALOL.

Guaiacol-salol, $C_6H_4.OH.COO(C_6H_4.OCH_3) = C_{14}H_{12}O_4$, the salicylic ester of guaiacol, analogous to salol.

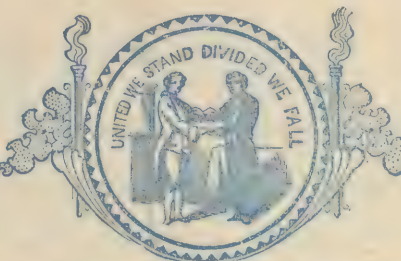
Actions and Dosage.—This compound acts like its constituents, being antiseptic and antirheumatic. It is recommended in phthisical diarrhoea, dysentery, rheumatism, marasmus, chorea, etc. Dosage.—1 Gm. (15 grains). Manufactured by the Fabrik von Heyden, Radebeul near Dresden (Merek & Co., New York).

GUIAMAR.

Guamar, $C_6H_4.OCH_2O(CH_2OH.CHOH.CH_2)_2$, 1:2 = $C_{10}H_{14}O_4$, the monoguaiacol ester of glycerin.

Actions and Uses.—The chief value of guamar arises from the liberation of guaiacol, partly in the stomach and partly in the intestinal canal, and being split up by the gastric and intestinal contents with the assimilation of one molecule of water into guaiacol and glycerin. By this evolution of guaiacol it is believed to exert a useful antiseptic action in the intestinal canal. Moreover, it is asserted that it is absorbed by the skin as readily as by the alimentary canal, and that it is without effect on the sound tissue, but becomes effective at the location of the diseased part. It is said not to interfere with the normal process of digestion, but, on the contrary, to be followed by decided tonic action. It is recommended as a substitute for guaiacol in all cases where the latter is indicated. In the form of ointment it has been recommended in acute articular rheumatism. Dosage.—0.3 to 1.3 Gm. (5 to 20 grains) in capsules or dissolved in warm water. Locally, in the form of 25 per cent. ointment with wool fat (lanolin), by itself, or combined with belladonna, zinc or mercurial ointment, etc. Manufactured by Mallinckrodt Chemical Works, St. Louis.

KENTUCKY MEDICAL JOURNAL



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No. 6.

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An effervescent tablet of Cystogen ($C_6 H_{12} N_4$)
 3 grains and Lithium Tartrate 3 grains.

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KENTUCKY MEDICAL JOURNAL.

BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION.

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VERNON ROBBINS

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THE ATLANTIC CITY MEETING.

Like the meeting held at Boston last year, the meeting of the American Medical Association at Atlantic City will always be a memorable one in the minds of those who enjoyed the privilege of attending it. This could hardly be otherwise with 3,701 members registered as being in actual attendance, and with probably nearly half as many more ladies and other visitors. In fact, the audience at the first General Meeting was so vast as to tax to the utmost the powers of the most experienced authors, and some of the sections were as large as the attendance of the entire Association under the old regime. On account of its size, the problem of entertaining the Association has become a serious one, and it may be that Atlantic City, where almost every house is a hotel, and which has so many attractions otherwise, will become a frequent meeting place. The next meeting will be held in Chicago, but our friends in that great city realize that the capacity of its hotels will be taxed to the limit.

One could not look upon the vast sea of upturned, earnest, intelligent faces, or listen to the orations, papers or discussions, in the general meetings, the sections or the House of Delegates, without a pardonable swell of pride that he belonged to the great profession they all so well represented. And it was really a representative body. They were there from the most distant states and territories, some of the more distant having large delegations, but none more numerous or ably represented than Kentucky. At every gathering it was gratifying to see familiar faces from the Mountain, the "Pennyryle" and the Blue Grass regions, and Louisville had a strong representation. From every state and section the

constant acclaim was in regard to the constant growth of the organization, not only in membership, but especially in its power and influence in securing and enforcing legislation, and in looking after the business interests of the profession.

But more remarkable by far than even the great attendance, the magnificent personnel, and other general impressions, was the defeat of the quack proprietary medicine interests at every turn. With an ingenuity and activity worthy of a better cause they had marshaled their forces for a last desperate struggle. They were on the ground early, making common cause with the discredited medical schools, cheap fee insurance, and every other antagonistic interest, and, having chosen their own line of attack, the alliance looked like a formidable one to those not acquainted with the intelligence, temper and power of our organization, which reaches into nearly every county in every state and territory. They found themselves confronted in the sections, in the House of Delegates and in the private counsels, by such an overwhelming sentiment in favor of the JOURNAL, the Council on Pharmacy, the Council on Education, the Committee on Insurance, and of common honesty and decency in advertising and dispensing, that it took the heart out of their cause in a way which would forever put an end to their slanders against the organization and its friends, but for the untold millions invested in these fake preparations.

In order to give a connected idea of the various activities of the Association conducted under the general supervision of the House of Delegates, in which every member of the organization has a direct and equal interest, next month's issue will contain a liberal abstract of the detailed proceedings. In advance of that, comment will be made now on the re-

ports from several of the more important departments.

BOARD OF TRUSTEES.

The report of the trustees, the executive and finance committee of the House of Delegates, covered the operations for the year in detail, giving the salary or wages of every official and employee in the JOURNAL office and elsewhere, nearly 200 in number, and accounting for every expenditure down to the last nickel. An interesting feature of the report was that showing the increase in membership in the Association from 7,997 on January 1, 1899, the year before the re-organization movement began, to 26,255 on January 1, 1907, and an increase in the subscribers for the JOURNAL during the same period from 2,453 to 20,166. Nearly all of the subscribers are members of their respective county and state societies and would be transferred to membership list without expense upon application, signed by the officers of the county society. The increase in income and expenditures have been in about the same proportion. For instance, the total increase in income from advertising, membership dues and subscriptions, from 1905 to 1906 was \$45,979.95. To give an idea of the growth in another way, the postage on the JOURNAL in 1899 was \$3,905.65; in 1906 it was \$17,066.62. That the Association is now on such a sound financial basis is largely due to the excellent management of Dr. Simmons and the Board of Trustees is now fully recognized, and these gentlemen were well entitled to the rising vote of thanks unanimously accorded them, especially as the members of the Board perform their arduous and responsible duties without compensation. As the Association is in the nature of a stock company in which every member has an equal share, and through their delegates an equal voice, it is a pleasure to report these healthy conditions and prospects.

COUNCIL ON PHARMACY.

After full consideration, strong resolutions were passed endorsing the work of the Council on Pharmacy, urging both state and privately owned journals to refuse entry to their advertising columns of all preparations not approved by the Council, and advising the profession to support or to receive into their offices only such journals as will co-operate with the Association and Council in their campaign in favor of common honesty in pharmaceuticals, and that they shall use no preparations in practice of the composition of which they have not full information. We again appeal to the profession of Kentucky to stand by the Council in this crusade, to return in the next mail all journals coming to them with advertisements of Antikamnia, An-

asarcin, Vin Mariana and other discredited preparations, and to use no remedy in practice not contained in the U. S. Pharmacopoea, National Formulary, or approved by the Council on Pharmacy.

COUNCIL ON EDUCATION.

The report of this Council, which is in reality a national bureau of medical education with permanent headquarters and a trained clerical force, in the JOURNAL office, was one of the most interesting features of the meeting. In the most complete and impartial way it summarized the results of a personal inspection of each of the 160 medical colleges of the United States as to equipment, teaching facilities and methods, the results of examination of their graduates before all of the state and territorial examining boards, and facts in regard to endowment and other similar matters furnished by the faculties of each college. Each college is graded in accordance with the showing made from all of these points of view, the schools of the entire country being divided into three general classes—those entitled to recognition by state boards upon the present showing, those which should be conditioned until certain indicated improvements in equipment and methods are made, and those which are not entitled to recognition. This is the most important step that has ever been taken in the field of Medical Education in this country, laying the foundation for a complete, systematic reform, and giving the reasons demanding it in a way which cannot but appeal to every right-thinking person, layman or physician who will study the facts and figures presented. The report received the unanimous and enthusiastic support of the House of Delegates, and was referred to the state examining boards for such co-operative action as would give the profession and people the full benefit of the labors of the Council.

INSURANCE FEES.

The report of the Committee on Insurance was a very strong and able one, and sustains the position first taken by the Kentucky profession at every point. Giving the names of the leading companies which have always adhered to, or which have restored the full fee for examinations, and reciting at length the protracted efforts made, and the failure, to secure similar action by the New York Life, Mutual and Equitable, the committee finds that the claim of these companies that the reduction of fees became necessary on account of recent legislation in New York was not warranted by the facts, and that while "these companies insist that they be left to deal with individual physicians and not with the profession as a whole," that "they themselves

have practically agreed to stand together in maintaining the reduced, insufficient and, we believe, unjust fee" and "that the companies can and should continue to pay a minimum fee of \$5.00 for examinations." The report was adopted unanimously, the committee was discharged so that the insurance people might know that this action upon the part of the American Medical Association was final, and "the whole matter was referred to the state and county societies for such action as they may deem wise and proper." It was urged, however, that the will of the majority be not made a test of membership, kindness and moral suasion to be relied upon instead.

SMOOTH ATTEMPT TO WORK KENTUCKY DOCTORS.

Because Kentucky has led in the fight against the reduction of fees for insurance examinations, the three great discredited companies led by the New York Life, have made repeated boasts that they would break down our organization against them regardless of the cost. As a part of this plan for making inroads upon us, in which these companies appear to be acting in concert, the New York Life has opened up correspondence with some of our physicians, especially the younger and less busy men, in nearly every county, and has sent its ablest and most astute representatives to them in many instances, with flattering offers of permanent employment at good salaries instead of fees and other inducements. Warren county seems to have been selected as a special point for such attacks. Not only have established members of the profession been repeatedly solicited in this way, but young men just located, who had not had time to join the county society, were approached. As this game has been worked in other cities and states by the same company, and the salary reduced as soon as the victim had been separated from his brethren and made helpless, we feel that the profession should be put on guard against this shrewd and insidious attempt to debauch it. Let Kentucky continue to set an example to the other states. "United we stand; divided we fall."

EXCUSES.

Why do you not attend the meetings of your county society? This question has been asked of a number of the submerged element in our profession, some of whom are members but are never present, while others had never become interested in their own local society.

A majority, perhaps, responded: "Too busy. I just can't spare the time to attend societies and read journals. My patients demand all my time." We wonder if it ever

occurred to these men that Gross, McDowell and Yandell never missed a meeting of their local, national or state societies. The men who use this excuse are usually too busy pottering around their daily calls, poorly educated, with too little practical knowledge to know how to direct their patients for an extra day. These men usually and naturally receive small fees for the exercise of their small capacities, and it means a real loss to miss the two or three paid calls in a day. The remedy seems easy. Read, study and mingle with your fellows so you will really be worth something to your patients and you will soon find that the demand for your services will increase and that this will be accompanied by a proportionate increase in your income. Of course you will feel a hesitancy about discussing subjects at your first few meetings, but this will soon pass away, and if you will try it a few months you will learn of how much real, every-day value is medical society work. Consider all the doctors you know, and everyone who has made an unusual *professional* success has been a society worker.

Another class are the men who have already arrived at success, and, forgetful of the ladder by which they climbed, now neglect their county societies to revel in the higher flights of specialism. This class deserve no sympathy. They are the ones who write numerous text books sufficiently clear to enable the careful reader to discover that most every patient needs the special care of the author. These men would fill the columns of the journals, and they do of the lesser and lower class of nostrum-supported ones, with their beautiful, too highly scientific papers—most of them general or special pleas as to why this especial author should do your consultation work on patients that are able to pay. This class deserves no sympathy. View with suspicion the "great" man whose voice is never quoted in his county society. If he is unwilling to lend his voice and knowledge to his local confreres, it is usually because the former has been cultivated at the expense of the latter. If he is too wise for his local profession, and prefers to work in larger—and distant—circles, he fails to deserve the support of his fellows.

Still another division of the profession state frankly that their medical education was too limited for them to be able to interest themselves in scientific discussions. These men are really to be pitied. Poorly prepared for entrance to medical colleges which had practically no facilities for real work, they are terribly handicapped in the battle of life. Sometimes they succeed in fooling many people—ignorant like themselves — for a long

time, but they are afraid to attend medical meetings for fear they will expose their ignorance. These men need our help and encouragement, not our reproach. They are treating helpless sick people, and our medical societies do no greater good than in inducing such men to attend and then inducting them into the post graduate work which will do so much to help them be better—more useful physicians.

A smaller and a lower class are those who actually oppose medical organization and remain away so they may tell their colleagues' patrons: "While — and — are attending medical meetings and conspiring to raise your medical bills and put you on the black list and to run medical politics, I am staying with my poor sick friends attending to my duty. If your doctor is away send for me." These contemptible practitioners of the "black art" school never succeed in elevating themselves by their own boot-straps out of the mire of their conceit and mischievousness. They may flourish for a time in a small way, but their lack of progress, their envyings and their back-bitings will redound sooner or later to their discredit and their shame. "Let the fool alone in his folly." Medical societies nor other instrumentalities of civilization and improvement can better such men. Happily they are not immortal, and when they vex you it is well to remember that when they die their deeds will die with them, while every good deed you do your fellow men keep multiplying through eternity. "As ye sow, so shall ye reap."

STUDENTS.

When your son or your friend's son asks your advice about attending medical colleges it is especially important that you dissuade him from starting unless he is willing to work and already knows how to acquire knowledge. A few men are born students. These seem to be able to retain every essential put before them. The vast majority of medical students, if they know how to study at all, have learned in school or college under a competent teacher. It is too late to learn how to acquire knowledge after matriculation in a medical college. In the past three years one-fifth of the applicants for medical licensure in this state have been rejected. These young men should never have studied medicine at all. They did not have the preliminary education necessary and their answers to questions showed conclusively that it was unsafe to trust the lives of our people in their hands. It is much easier to limit the number of unfit and incompetent physicians

by preventing their attendance upon a medical college than by rejecting them after four years misspent in such an institution where they are incapable of assimilating knowledge.

YOUR DUES.

If you have not paid your annual dues to your county secretary, this is the last issue of the JOURNAL which will reach you. Under the Constitution of the State Association and your County Society you are suspended on July 1 unless your dues are paid. On that date the State Secretary will begin the preparation of a list for the Secretary of the American Medical Association, and unless you are a member in good standing in your county society you cannot be a member of that great body. In the August number we will begin the publication of this list. You surely do not want your name in the non-members' list. Unless you are a member of your county society your name appears in the American Medical Directory in small type, and unless you are in good standing in your county society and in the state and national associations of the system of medicine you practice, you cannot get reciprocity with any other state, as the Kentucky State Board of Health only recommends physicians who are endorsed and approved by their local colleagues who know them best. You need us, and we need you. If you have not already done so, send your dues to your county secretary *to-day* and ask him to rush them to the State Secretary. If you fail to do this, do not be surprised when you fail to receive the August *Journal*.

GET RESULTS.

Dr. Bullitt's plea in our June issue for a clearer diagnosis was both clear and timely and we trust it was read by every member of the Association. If you are unable to make a diagnosis in any particular case, do not obscure the symptoms, mislead your patient nor endanger his life or health by giving him nostrums or drugs about which you are equally ignorant. You know the physiological and therapeutic action of aconite, strychnine, and such standard drugs. Exhibit them singly or in such simple combination that you know what effect to expect, and give a sufficient dose, repeated at repeated intervals until the full effect of the drug is obtained. If this first remedy or combination does not produce the desired effect, and you are sure of the potency of your preparation, change to a more powerful one and get results. Let us review our therapeutics, study *materia medica*, cut out nostrums and

drugs of whose contents and action we know nothing and then when we make a diagnosis give enough simple, direct medication and the necessary hygienic and dietetic management to produce results.

QUACKERY GETS A HARD BLOW.

So lamentably common is to hear from the bench nonsense as to the nature and definition of "medical practice," that it is highly refreshing to read the statements made by Justice John Proctor Clarke of the Appellate Division, Supreme Court, in confirming the conviction, as an illegal practitioner, of one E. Burton Allcutt, who called himself a doctor and exploited in this city a crazy system of massage under the name of "mechano-neural therapy."

Allcutt is a trained nurse who secured a diploma from a New Jersey "school" which, whatever it is, does not even pretend to be a school of medicine, and is not recognized as such by the New Jersey Regents. The New York County Medical Society sent one of its women detectives to him for treatment and had him arrested after he had taken her money on several occasions under pretense of curing her of a malady she did not have. Allcutt's defense was the one which so many quacks as ignorant and unscrupulous as himself have found effective—he had not given any drugs, and therefore had not violated the law which forbids the unlicensed practice of medicine.

This impudent plea Justice Clarke promptly brushed aside. "To confine," he said, "the definition of the words 'practice medicine' to the mere administration of drugs or the use of surgical instruments would be to eliminate the very cornerstone of successful medical practice, namely, the diagnosis. It would rule out of the profession those great physicians whose work is confined to consultations, the diagnosticians who leave to others the details of practice." To illustrate the absurdity of the defense's contention the Justice asked if it could be doubted that the cure of tuberculosis by the skilful use of fresh air and diet was medical practice or that the men doing it were doctors. In a few States, he admitted, the administration of drugs is by statute made an essential and necessary feature of "medical practice" as there defined, but New York, fortunately has no such imbecile law behind which its quacks can shelter themselves.

In conclusion the Justice said: "When we find, as in this case, a defendant holding himself out by sign and card as a doctor, with office hours, who talks of his patients

and gives treatments who makes a diagnosis and prescribes diet and conduct and remedies, simple though they may be, and who asserts the power to cure all diseases that any physician can cure without drugs and also diseases that they cannot cure with drugs, and who takes payment for a consultation wherein there was an examination and determination of the trouble, that is, a diagnosis, as well as payment for a subsequent treatment, even if no drugs are administered, we must hold that he comes within the purview of the statute prohibiting the practice of medicine without being lawfully authorized and registered."

The verdict of the lower court was confirmed, with no dissenting opinion. The decision is of much importance, since it will cover the whole pestilent tribe of "mental" and "faith" healers, and it will greatly help the County Medical Society in its admirable war on quackery.

THE IMPORTANCE OF A COUNTY HOSPITAL

By J. C. MOSELEY.

That hospital to care for the sick poor of our rural districts is just as necessary as such care for city dwellers will not be denied by any normal thinking individual, yet such hospital advantages are not within reach of the unfortunate who happens to make his home outside of city limits and but little effort seems to have been made for the attainment thereof.

The present method of caring for the sick poor of the counties, outside of the cities, is by pauper orders from Magistrates or by contract work. In either case the Fiscal authorities complain of being fleeced by the physicians, while the physicians know that they are only half paid, and the patients barely half treated, for in pauper homes intelligent nursing is not looked for and proper diet is impossible, as a rule, to obtain; for when an order to the physician is necessary, one likewise to the grocer is necessary, and the grocer is directed to supply so many potatoes and so many pounds of bacon: fine diet for one sick of fever.

In a well equipped hospital physicians could afford to treat this class of patients without pay, giving credit in full for the experience had, and is done in our larger city hospitals, and in reality be better off than is now the case with one-half money pay and practically no clinical advantage derived for with such ignorant nursing as is usually met with in these cases, but little advantage can possibly be derived by physicians. With

ambulance most cases could be removed from home to hospital even from most distant parts of county, for example, think of how far some are removed from their homes to Cook county hospital, in Chicago and Bellevue in New York.

If a salary should be paid to the physician in charge of hospital, and it would be better so—the expense to the county would not be much larger than is now the case, for then one man could treat all cases in one building, and not have to ride miles from one case to another, and cases could be nursed and boarded for what medical treatment now costs.

Again, less sickness would exist for with the trained nurse comes sanitation and a case of typhoid fever would end with the patient's recovery or death, the germ being killed as they leave the body, instead of being thrown on the hillside to pollute neighboring streams, or left on hands of nurses to contaminate food and infect remaining members of household, demanding more pauper orders. With patients in a hospital the source of infection would be removed. Granting that expense would be greater by hospital treatment, we have yet to face the fact that if it is the duty of the county and the state says it is to furnish medical treatment to sick paupers, is it not morally just as much her duty to furnish the other half-trained nursing—of the change for them to get well, as to furnish the first? Such hospitals would also give us more trained nurses, and every well trained nurse in a county is one of the most valuable assets of that county.

Henderson county through her fiscal officials is now trying to formulate a plan for this method of treatment. Other counties will do the same thing if the physicians will only take the time to explain to the officials that more benefit can be derived for the same amount of money. The cry of "abandoned farms should be changed to "abandoned farmers."

SCIENTIFIC EDITORIALS.

HYDRASTIS. (U. S. P.)

ORIGIN AND DESCRIPTION.—The dried rhizome and roots of *Hydrastis Canadensis*, yielding when assayed, not less than 25% hydrastine; indigenous in N. A., growing in rich, moist woods from the Carolinas to Canada, along and west of the Alleghenies. The most important constituents are: *Hy-*

drastine, a white crystalline alkaloid; *berberine*, a yellow alkaloid, intensely bitter; *canadine*, which is present in too small quantities to be of practical importance. The commercial *Hydrastis* is an impure hydrochloride of berberine; *hydrastinine* is an artificial alkaloid formed from hydrastine.

Preparations and Dosage: *Fluidextractum Hydrastis* (U.S.P.) contains 2% hydrastine, miscible with water and alcohol. Dose: 2 c. c. (m. xxx).

Glyceritum Hydrastis. (U. S. P.) A fluid extract with equal volumes of glycerine and water as a menstruum. Dose: 4 c. c. (1 dram).

Tinctura Hydrastis. (U.S.P.)—20%; contains 0.4% hydrastine. Dose:—4 c. c. (1 dram).

Hydrastina. (U. S. P.) Insoluble in water, soluble in 135 alcohol and 2 chloroform. Dose:—0.03 gm. ($\frac{1}{2}$ grain).

Hydrochloridum Hydrastininæ U. S. P. Soluble in 0.3 water; 3 alcohol and 286 chloroform. Dose:—0.03 gm. ($\frac{1}{2}$ grain).

Cotaruinæ Hydrochloridum. (Stypticin) unofficial. A yellow powder, soluble in water and alcohol. Dose 0.03 gm. ($\frac{1}{2}$ grain), or hypodermically in 10% sol.

Incompatibility: Alkalies, mineral and vegetable acids.

PHARMACOLOGICAL ACTION.

Local: Much has been written on the action of hydrastis on mucous membranes. Antiseptic properties and astringent action have been noted and emphasized. The former action is an exceedingly mild one and hence of but little practical importance. By virtue of the mild irritation produced locally it produces some constriction of blood vessels and an increased tone to supporting framework thus lessening excessive mucous formation characteristic of chronic inflammation of these surfaces. That this action has been exaggerated seems equally true after careful scrutiny of literature. More emphasis being placed upon the empirical suggestions of a long list of conditions in which it is to be employed, than to a consideration of how it is to accomplish a remedial influence.

Internal:—Gastro-Intestinal System: Its influence here is largely due to *berberine* which is found also in *berberis vulgaris*, *xanthoxylum*, *Sanguinaria* and *podophyllum*; it is intensely bitter, and in common with all bitter principles, it is a stomachic; the effects follow within a half hour after its administration and consist of a mild hyperemia of the mucous membrane; a stimulation of the motor functions; an increased flow of digestive fluids caused reflexly; an increase of appetite and augmented rate of absorption. The

percentage of ferment, chlorides and hydrochloric acid is increased in physiological proportions. The pancreatic juice is increased, probably due in part to reflex stimulation and partly to an increase in secretin which aids in determining the manufacture of the pancreatic ferment. That the hepatic function is increased is probably an erroneous conclusion. In common with all stomachics it possesses antiseptic properties, limiting putrefaction and abnormal fermentation by hastening the digestion and absorption of contained food. Hirt, Binz and Pohl claim that the leucocytes are increased by the bitter tonics and Hofmeister states that the leucocytes play a not insignificant role in intestinal absorption. The motor activity of both stomach and bowel is reenforced by the local action of the bitter principle, as well as, the influence it has on the nervous mechanism to be described later. The administration of any bitter principle is largely ineffective if a period of more than one-half hour intervenes between its ingestion and that of the food. It seems probable that to the action of any stomachic in the mouth on the taste organs is due much of whatever beneficial effect it may have. Borisoff concludes that food and bitters introduced through an esophageal fistula or tube induce a distinctly lessened activity on part of stomach than when taken in the ordinary way. The Galenic preparations are preferable to the alkaloids as stomachics as they are less rapidly absorbed. If long continued or, given in large doses, hydrastis deranges the digestive functions and causes constipation.

Circulatory System: Hydrastis can hardly be called a cardiac stimulant in a pharmacological sense. In its action the following factors are involved: The pneumogastric nerve, the vaso-motor centers, the cardiac muscle and finally, the indirect effect of the convulsions with the accompanying respiratory movements and asphyxia. The pulse is primarily slowed, due to the stimulative influence on same; while still later it becomes slow again by direct action on cardiac muscle. The *tension* is primarily raised because of stimulation of vaso-motor centers in brain and cord. This action persists during the convulsive stage and is aided by it, to be followed by a lowering of the tension caused by depression of these centers and further contributed to by the direct depression of the heart muscle. The degree and importance of the preliminary rise in tension is under dispute. Marfori claims the rise is uncertain, small and short. Falek says the primary fall is absent after subcutaneous injection. That the rise is not prevented by section of the

splanchnic nerves or of the cord, high up, shows it to be due in part, at least, to heart stimulation or, on the vessels themselves (Fellner). Serdzeff claims to have proven an actual increase in working power of heart. Slow, powerful cardiac beats caused by hydrastine on an isolated heart of a frog were noted by Marfori; he also showed with the oncometer a constant contraction of the kidney, proving contraction of blood vessels. During the convulsive period it may be noted, that at the onset of irregular spasms the mean pressure rises because of the vaso-motor stimulation; during the tetanic stage the pressure is very high and the heart beat much more rapid, due to reflex vagi depression through muscular exertion largely; after the tetanus disappears, pressure falls below normal because of vaso-motor paralysis, central while the heart beats rapidly and weakly. The functional irritability of the vagi is eventually destroyed and the heart is arrested in diastole.

Nervous System: The centers of the medulla are first stimulated, followed by depression, particularly the respiratory and vaso-motor. The stimulation is due to an increased reflex excitability (more fully amplified under discussion of action on cord). Paralysis eventually results. The local application of a solution of hydrastine lessens the sensibility of sensory nerves and appears to have a direct depressant effect on motor nerve trunks. The reflex activity of the *cord* is heightened from below upward. The stimulant action can, perhaps, best be studied when rendered more conspicuous by the production of convulsions. A convulsion may be produced by (a) asphyxia; this form may be removed by artificial respiration, and may occur in the course of poisoning by many drugs which either depress the respiratory center, or mechanically interfere with admission of air—chloroform is illustrative of the first and nitrous oxide of the last. (b) Direct stimulation of the convulsive centers; this may be accomplished by stimulation of the motor areas, the medulla, muscles, sensory nerves, or the cord. Convulsions of cerebral origin are characterized by rhythmic twitchings of muscles—choreiform or epileptiform. Those of medullary origin, by clonic spasms, cyclic, with tendency toward emprosthotonus; of muscular, by increased tonus and fibrillary twitchings; of sensory nerves, by signs of pain, the movements irregular and directed toward removal of the irritant; while those of the spinal cord show increased reflexes, abrupt movements and a tetanic opisthotonus. Hydrastic convulsions are of spinal origin as may be shown by injecting a poison-

ous dose into a frog: then (1) destroy the brain and the convulsions continue; (2) destroy the medulla and same result is obtained, though occasionally the tetanus may be diminished for a time by the shock, but soon returns with former intensity; (3) divide sciatic nerve of one leg and it no longer participates in the convulsion. The next question to be settled is the *portion* of cord affected, motor cells or sensory? By the Baglioni experiment, which consists of destroying the circulation and applying the drug directly to the cord, it can be demonstrated conclusively that the effect is produced by its action on the sensory cells. Finally, are the convulsions due to an *origination of new impulses*, i. e.: direct stimulation of centers; or merely *intensifying ordinary ones*? Resistance to ordinary impulses may be increased at one or all of three points, viz: cells, endings and fibres of cord. In either case a slight stimulation leads to exaggerated motor response. Under hydrastis the *convulsions do not occur spontaneously*, but only on stimulation; this stimulation may be imperceptible to the observer, but it always exists, since cutting off all sensory impressions by cocaine will, experimentally, prevent the convulsions. *Paralytic Action*: The paralytic action on the medulla and cord is masked by the convulsions, showing, clinically, only during intervals of muscular relaxation and toward the end. Death is due to this action save where it occurs during respiratory spasm. The paralysis probably occurs in the following order: respiratory center, vaso-motor center, vagi center and finally, the cardiac muscle. Exhaustion, asphyxia and direct depression are all concerned in the paralysis. There is no narcosis, consciousness being preserved until asphyxial coma supervenes. Life can be prolonged by the use of chloral or curare which prevent the convulsions, or by artificial respiration which prevents the asphyxia. The convulsions are not the dangerous element in hydrastis poisoning, but the paralysis.

Respiratory System: The respiratory movements are increased as a result of stimulation of the center directly, and to some extent this action is reenforced reflexly by the increased muscular movements. Normally, the activity of the respiratory center is quite variable and its irritability may be so depressed by disease or drugs that absolute paralysis occurs. Hydrastis lessens or removes such depression and permits a given stimulus to produce greater results and thus bridges over a crisis. Under large doses tonic spasms of the respiratory muscles occurs materially interfering with the intake of oxy-

gen, and in yet larger doses paralysis of the center may occur.

Muscular System: According to Bunge when applied directly to muscle tissue it destroys its contractile power. Cerna states that this is preceded by a stage of excitation during which contractions are never complete and more prolonged. Internally, in small doses a tonic action may be observed, caused by an augmentation of a reflex excitability of the cord, since it must be remembered that not only the convulsive centers, but others as well are put in a condition more favorable for reflex action. Certain secondary results are observed in consequence of this increased activity, when larger doses are given. (a) *Pain*. The convulsions are always painful as in other forms of muscle cramp. The occasional cry at the beginning of the convulsion, as in strychnine poisoning, is not due to the pain, however, but to abrupt contraction of muscles of respiration. (b) *Increased metabolism* results because of increased oxygen consumption, an augmented use of glycogen and a larger output of carbon dioxide. (c) *Rise of blood pressure*. (d) *An increased pulse rate* (concentrated by vagi-stimulation) (e) *Increased temperature*. (f) *Asphyxia*, due to tetanic fixation of respiratory muscles and later to depression of the center. Glycosuria is caused by asphyxia, the sugar diminishing in the liver and increasing in the blood. If a tetanizing series of electric shocks be passed through a muscle poisoned by hydrastis, no real tetanus will occur, but instead a series of rapid contractions and relaxations.

Uterus: Schatz in 1883 called attention to the action of hydrastis on the uterus and suggested its practical value in the various forms of uterine hemorrhage. It may be considered an ecbolic in the real sense of producing contractions of the uterine muscle in both pregnant and non-pregnant states. This is accomplished, chiefly, through its influence on the center in the cord. Pembrey and Phillips claim, however, that it has no influence on the uterine musculature. The drug causes decided constriction of the uterine vessels through its vaso-motor influence, lessening the blood supply which, together with the contraction of the organ makes it a hemostat of no mean value. In such hemorrhages as post partum, it would seem to be of much less value than ergot, but in slow losses, as a menorrhagia, it is useful. It would seem to be of considerable benefit, according to most observers, in slow hemorrhages elsewhere in the body, since it contracts uterine vessels no more than others. It should be mentioned that there is not a uniformity in opinion as

to whether it will inaugurate uterine contractions independent of other factors. Serdsteff concludes it strengthens uterine action by its influence on the central nervous system by way of the vaso-motor tracts.

Hydrastinine: In the main the action of hydrastis is due to the hydrastine it contains; the effect of berberine on the gastro-intestinal system being a notable exception. Hydrastinine, an artificial alkaloid produced by Freund by oxidation of hydrastine, differs from it in action in the following respects:

1. Less disturbance of the centers of motion.
2. More pronounced and more prolonged rise of blood pressure due to greater constriction of blood vessels.
3. Less tendency to cardiac paralysis.
4. Less action on uterine muscle.

Bunge denies it constricts renal vessels and Paldrock claims they are even dilated. Bordet claims it has no influence in arresting hemorrhage from the womb during labor, or the puerperal period and further, that the progress of involution is unaffected.

Absorption and Elimination: The drug is very slowly absorbed. Bunge states that ten times as much perorem is necessary to kill as by hypodermic administration. The alkaloids are more rapidly absorbed from stomach and bowel than the other preparations.

It is eliminated chiefly by the kidney in an unchanged form. Hirschhausen found it in feces. The amount of urine is slightly increased, due to the increased tension in renal vessels. The elimination is very slow and the drug tends to accumulate in the system.

Therapeutical Indications: Hydrastis has been enthusiastically recommended by some authorities for a bizarre array of diseases. Its usefulness may, however, be said to be limited to such diseases as can be classed under three heads, and in each of these there are other agents of kindred action decidedly more efficacious. (a) Diseases of mucous membranes that can be topically treated and which are chronic in character, e. g. chronic rhinitis, vaginitis and urethritis. In such conditions the glycerite, as a general statement may be said to be the most useful preparation. The alkaloids are hardly to be recommended at all in such diseases. (b) As a vegetable bitter tonic: Such an indication is present during convalescence from the acute infectious diseases, e. g. Typhoid fever. It would also be of service in chronic gastritis. (c) As a vaso-motor stimulant: In congestive menorrhagia, persistent loss of blood following childbirth and abortion as well as hemoptysis are some conditions for which a knowledge of its hemostatic action

would suggest its use. Albuminuria is also sometimes modified by its administration. The following are among the many conditions for which it has been recommended: *Malarial fever*.—As an antiperiodic it is practically worthless, though its action as a stomachic would be desirable and useful and whatsoever benefit it manifests in this disease is almost entirely due to this influence; *Epilepsy*.—the number of reported benefited cases is too small and in the main too unreliable to command attention, and if conclusions may be deduced from its known physiological action it would seem useless; *Hemorrhoids*.—in this form of malady it is, at best, but a temporizing agent in a great majority of the cases, and save in inoperable cases had as well not be used; *carcinoma*.—if there be persistent tendency to hemorrhage and surgical intervention is inadvisable or has failed, the drug may be used solely for its hemostatic action and any hope as to its curative properties is doomed to disappointment, as it can go no further than its motor nerve tonic and gastric stimulation effects; *chancroids*.—It could only be of service after the cause of the disease has been destroyed by some active means and then employed as an ointment, or as the plain fluid extract to promote granulation of sluggish tissue repair. To sum up, a comparison of hydrastis, in those conditions in which it really meets an indication by internal administration, with cinchona, ergot and nux vomica is not distinctly flattering to the former.

VIRGIL E. SIMPSON.

CONDUCT OF LABOR—THE SECOND STAGE.

By EDWARD SPEIDEL.

The second stage of labor is generally defined, from the dilatation of the cervix, until the birth of the child. The rupture of the bag of waters, is generally coincident with the full dilatation and in cases in which it fails to rupture the characteristic pains of the second stage are also generally absent. It is in such cases, that an irresistible desire to rupture the membranes, possesses the obstetrician.

As mentioned in a previous paper, it is a safe plan never to do so in a primipara, even if labor progresses so far that the distended bag, appears at the vulva. With multipara, there is less risk if the cervix is well dilated and soft, the rupture of the membranes will at times bring about the completion of the labor in a few pains. Consequently under such conditions, and with strong pains, the procedure is safe and advisable.

The various text books advise sterilized

hair pins, pointed matches, etc., for the purpose, but nothing is handier than a single blade of the clean scissors, that is on hand for cutting the umbilical cord. This should be carried in the palm of the right hand with the point a short distance from the end of the index finger, then with the next pain this finger is introduced into the vagina and pressed against the bulging bag of waters. As the pain wears off, not at the height of the pain, the tip of the scissors blade is pushed through the membranes and the finger withdrawn. With the next pain, the slight rip that has been made in the membranes will tear and rupture will take place. It is well to remember in this connection, that a caput succedaneum closely resembles the bag of waters and must be differentiated from it before such procedure is attempted.

The patient of course has been put to bed towards the end of the first stage, in fact it is advised, that the patient be put to bed when the os is 2-3 dilated. A rupture of the bag of waters with the patient out of bed and in the upright position, would be followed by serious consequences. In a primipara the cord might prolapse and with the impact of the head against it in each succeeding pain, dangerous asphyxia of the fetus would follow.

In multipara it could result in a precipitate delivery, the child being forced to the floor and injured, the umbilical cord torn loose at the abdomen of the child or premature separation of the placenta might result from the dragging upon it and the life of both mother and child placed in jeopardy.

For purposes of defecation or micturition, the bed pan must be used as it would be equally dangerous to allow the patient to use the toilet for such purposes at this time.

The patient should lie on the right side of the bed, with the hips resting upon some contrivance to absorb or catch the discharges as they escape. This can either be a draw sheet, a bran bag, a Kelly pad or obstetrical cushion. Each has its advantages and disadvantages.

The draw sheet, that is a clean sheet folded a number of times so that it is of the proper size and thickness, is the cleanest, but often does not prevent the discharge from contaminating other parts of the bed. A bran bag is made by putting one-half bushel of sifted bran into a clean pillow case about one yard square. It is very effective for the purpose, provided, of course, that the bran is clean and sifted free from fine dust and that the bag is first washed thoroughly and dried. With the Kelly pad, there is the disadvantage that when the patient's hips rest in it, the

modern bed sags with the weight and an excess of the discharge instead of running over the apron into the bucket that should be at the side of the bed, is more apt to run over the rounded inflated brim of the pad and soil the bed.

The obstetrical rubber cushion also sags with the weight of the patient, but being large in circumference it readily holds the discharge and so it may be claimed to be the preferable of the four.

The physician, of course, should know at once by the conduct and appearance of his patient that she is in the second stage, the change in the character of the pains, the red congested face and distended veins of the neck being sufficient evidence. Under favorable circumstances, the rupture of the bag of waters can easily be heard and if not, then the slight discharge of Liquor Amnii upon the subsidence of each pain, will be conclusive. It is well to instruct the nurse as to how to tell when her patient is in the second stage, and that can be made very plain by telling her that she will conduct herself, just as one straining very severely at stool.

No vaginal examinations should be made in the second stage, the physician should become acquainted with the important points that denote progress in this stage and should depend upon them, instead of upon his sense of touch and so the patient's complaint of severe pain in the region of the sacrum, will signify to him, that the head is pressing upon the anterior sacral nerves and that its widest circumference is in the pelvic cavity. The hand placed against the vulva in a pain, will notice the perineum pushing outwards, denoting that the presenting part has reached the pelvic floor. Further pressure upon the perineum and stretching of it, will result in temporary paralysis of the sphincter ani and the fear on the part of the patient that the bowels will act. Then the appearance of the moulded occiput at the ostium vagina, the crowning of the vulva as it is called, will, of course, signify the end of this stage of labor.

It affords the patient some comfort if she may change her position at times during the second stage. Sitting up in bed with the arms clasping the knees, is restful, and expedites labor.

It will be remembered, that this is very nearly the position assumed by the Indian squaw throughout labor.

Lying upon the side is advisable at times and then the patient should turn to that side towards which the occiput points, for that will favor anterior rotation.

If the pains are not regular and strong,

then the administration of 10 grains of quinine every half hour for two or three doses, will generally help matters along.

In the bearing down pains the patient will expect some assistance. The nurse may sit at the foot of the bed and during a pain grasp the wrists of the patient, and allow her to brace her knees against the nurse's chest. By no means should she clasp hands with the patient, as in the height of a pain, the patient often exerts so much pressure, that the nurse's hands may be very sore at the end of the labor. A twisted sheet, or the so-called obstetrical harness are effective devices, if they can be arranged conveniently on the lying-in bed, the double bed as a general thing rendering them impractical.

For the delivery, either the dorso-sacral or the left lateral position, should be chosen. Each has its advantages and disadvantages.

The dorso-sacral is best, when the physician is without intelligent assistance. He can then administer the chloroform himself, and can regulate the amount according to the conduct of the patient and the stage of the delivery. At the onset of a pain, a sufficient amount of chloroform is poured upon the mask with the left hand and held over the nostrils of the patient. The ulnar surface of the left hand resting upon the forehead of the patient, the extent of anesthesia can readily be regulated by elevating or depressing the mask, the clean right hand held against the perineum noting the indication. When the head is about to be born, the anesthesia can be crowded and the head delivered after the pain has worn off.

In the left lateral position, the perineum is in sight all the time and can be protected more readily, but at the crucial moment, the anesthetic must be given by an assistant and in consequence, the operator has not complete control of the expulsion. It is true, however, that as the intra abdominal pressure is diminished in the left lateral position, the pains are not apt to be as forcible at the birth of the head as they are in the dorso-sacral position. A number of measures can be used for the protection of the perineum. Not only should the patient be deeply anesthetized and the head manipulated out of the vulva after the pain has worn off, but the delivery of the head should be delayed before this stage is reached for from 10 to 15 minutes. After each pain the head should be pushed back into the vagina when it begins to crown the vulva in order that the circulation in these parts is in no wise interfered with. In consequence there is a general stretching of these structures which by this method become very elastic. If the perineum is un-

usually rigid, then massaging the thoroughly cleansed parts with the clean index and middle finger of the right hand as advised by Edgar, may prevent rupture. In the final delivery, the only procedure that is recognized at present is pressing the occiput up against the symphysis so that the suboccipito bregmatic diameter comes in relation with the pelvic outlet. Episiotomy, that is cutting the sides of the vulva to prevent a central tear of the perineum has been discarded.

The cleansing of the nose and mouth of mucus, with small pieces of gauze dipped in to Boric Acid Solution, should be performed as soon as the head is born, in order that mucus may not be aspirated into the trachea when the child takes its first deep inspiration. This can readily be done in the uncomfortably long interval that generally follows upon the birth of the head, when the deep congestion that follows is apt to lead the inexperienced to fear deep asphyxia. Any loops of cord felt around the neck of the child, should of course also be loosened and carried over the child's head at this time, care being taken not to pull on the wrong end and make traction on the part attached to the baby's umbilicus.

The shoulders are born by lifting the head up towards the symphysis, after the anterior shoulder has engaged behind the pubis, in consequence the cervicoacromial diameter instead of the bisacromial engages in the outlet, the posterior shoulder being born first and a simple depression of the head bringing out the anterior shoulder.

It must be remembered that improper delivery of the shoulders, may result in the laceration of a perineum that has been left intact by the passage of the head.

The trunk and legs of the child, of course escape with the shoulders and the delivery it at an end.

THE OPHTHALMOLOGICAL AND OTOLOGICAL SECTIONS OF THE AMERICAN MEDICAL ASSOCIATION.

Every member of our large National Medical Association who was fortunate enough to attend its 58th annual session at Atlantic City June 4th, 5th, and 6th is full of praise of the workings of the large body of medical men. While in point of attendance the session this year did not quite come up to the meeting of last year in Boston, which is situated in a more crowded section of the country, great success attended the 1907 meeting in every other way. As upon former visits to America's famous bathing resort the hotels were well able to take care of the many

visitors, while the numerous pavillions and halls provided meeting places for the different sections. The exhibition of pathological specimens is worthy of special comment. That the great variety of pathological specimens, well mounted and labeled, were of much interest was evidenced by the large attendance in this hall. The manufacturers' exhibits, including instruments, drugs, etc., were well arranged and catalogued.

The custom of having prominent foreign physicians as guests of the different sections brought such men as Hess, Küster, Killian, Kocher, Peterson, and others. Their presence added much to the interest of the sessions.

The ophthalmological section, which has always been one of the most progressive in the Association, had a record breaking attendance this year, 395 oculists having registered on the afternoon of the third day. The section had for its guest Professor Hess, of Wurtzburg, Germany, who in almost perfect English delivered a long and interesting discourse on the changes of the lens during accommodation.

The mailing of preessional transactions which was inaugurated by the ophthalmological section last year, was again carried out with success. The essayist is allowed five minutes to present a resume of his published paper before its discussion. By presenting the subject in an abbreviated paper more time can be devoted to the discussion, which seems to add interest and animation to the proceedings. The principal theme to occupy the ophthalmologists was the technique of cataract operations. It has always been the subject of much discussion whether a cataractous lens should be removed without excising a piece of the iris, the so-called simple extraction, or whether extraction with an iridectomy is the preferable procedure. Dr. Herman Knapp's years of successful experience with the simple extraction has secured many advocates of this operation in this country. While the simple extraction leaves a round pupil and consequently gives the best cosmetic result it offers no advantage as far as the function of the eye is concerned. As it has the disadvantage of making the delivery of the lens more difficult and consequent bruising of the iris and of having subsequent prolapse of the iris in about 10 per cent. of cases necessitating secondary iridectomy the impression seemed to prevail that an iridectomy should always be performed at the time of the extraction. The section also devoted considerable time to the study of squint, with reference to causation and treatment, but no new ideas of any conse-

quence were advanced. Dr. Wilder, of Chicago was made chairman of the ophthalmological section for the ensuing year.

The section of otology fell in line with the oculists and for the first time adopted the method of mailing preessional transactions and encouraging more lengthy and general discussion. The section was fortunate in having the distinguished Professor Killian, of Freiburg, as its guest. Prof. Küster, although guest of the surgical section, also spent some time with the aurists, and took part in their proceedings.

The study of the middle turbinate bone with special reference to the anatomy and pathology, indications for partial and complete removal and the methods of operating occupied much of the time of the otological sessions. The treatment of chronic purulent otitis media was also discussed very actively in an endeavor to reach some conclusion as to what class of cases should be subjected to the radical mastoid operation.

Several years ago otologists were enthusiastic about this operation and many patients were operated upon radically without any great effort having been made to cure the otorrhoea by conservative treatment. At the present the pendulum seems to be swinging the other way and cases are cured by careful local therapeutic treatment which several years ago would have been subjected to the radical operation. However, otologists are agreed that cases of chronic otorrhoea which have failed to yield to conservative treatment and in which there are symptoms of retention of pus, such as recurrent pain, vertigo, headache, dizziness, etc., should be operated upon radically. The attendance at the sessions of the otologists was about 300. Dr. Loeb, of St. Louis, was elected next chairman.

THE COMMERCIAL DOMINATION OF THERAPEUTICS AND THE MOVEMENT FOR REFORM.*

GEORGE H. SIMMONS, M. D., CHICAGO.
PROPRIETARY MEDICINE A RECENT DEVELOPMENT.

The proprietary medicine business as we know it is a development of only a little over a generation. In 1875, Lawrence, of *Medical Brief* fame (?), and his junta of nostrum makers, whose output and that of their offshoots alone have run into the hundreds, were unknown. Thirty years ago the so-called German synthetic chemicals were unheard of as medicines; now, if we include the true

* The Annual Oration before the Medical and Chirurgical Faculty of Maryland, April 24, 1907. Reprinted from the JOURNAL of A. M. A., May 18, 1907.

and the false, there are thousands of them. Including the typical nostrums, the more or less legitimate proprietary mixtures and the synthetic compounds, the number of proprietary medicines has become so vast that no one is rash enough to attempt to estimate it. A few of these, we may admit, have a distinct value; they represent original work and are worthy of recognition as remedial agents. The vast majority, however, are but the simplest of mixtures or are well-known drugs put out under fanciful names, with no advantage whatever; or are absolute frauds and swindles. Some of these remedies are made by manufacturing pharmaceutical and chemical houses of greater or less repute; the majority by men—or “companies”—who know nothing about medicine, pharmacy or chemistry, and who have gone into the business as they might have gone into any other get-rich-quick enterprise.

This business has been growing more rapidly than ever during recent years, and the statement made here in Baltimore last December that the use of this class of preparations has doubled during the last decade is probably true. But worse than the increase in number is the development in the advertising literature of unblushing falsehood and palpable deception. Conditions in this regard have become so disgraceful—I put this in the past tense because there has been a change since the Council began its work—that there seemed to be no statement too silly, no claim too extravagant, and no falsehood too brazen for use by those who wrote the advertising literature that physicians were asked to read and to believe. It was, therefore, not only the character of the preparations, but the methods of exploitation that had become unbearable and a disgrace to the profession that tolerated it. In brief, this business, the annual profits of which run into the millions, has grown until the use of proprietary medicines by many physicians has almost displaced the use of the individual official drug. It has checked advance in scientific methods of treatment, inhibited intelligent clinical observation and developed an optimism that is unwarranted by facts—an optimism that is more fatal than the most radical therapeutic nihilism. But above and worse than all, this commercialized materia medica has blighted our literature by debauching our medical journals and even by tainting our text-books.

And whose is the fault? That the business has developed in this country to such extent, with scarcely a protest on the part of our profession, is a reflection on the common sense and intelligence of the physicians of

the United States. We, as well as manufacturers, are at fault. We must assume the blame for becoming such easy dupes to their enterprise and sagacity.

But a change is taking place; a halt has been called, and our profession is awakening to the disgrace of it all. It is about the movement for ridding our profession of this disgrace that I want to speak to-night.

NO PROTECTION IN THE PAST.

We have long suffered from a want of governmental or other supervision over the manufacture of medicines. In no other country has the standard and quality of drugs been left entirely to the manufacturer's honor. From time to time the medical profession has made spasmodic, but weak, efforts to remedy the condition: we find records of this even as early as the beginning of the nineteenth century.

The agitation of those early days resulted in the adoption of a Pharmacopeia, the first issue of which was published in 1820. This standard, by the way, was the work of physicians and was gotten out by them for the guidance of pharmacists, who, however, had nothing to do with its preparation. It is to be regretted that conditions have changed, and that, while the physicians then were the ones interested, for the last fifty years they have left it practically to the pharmacists. While the Pharmacopeia furnishes standards which were accepted by a few as authoritative, it was, after all, but an advisory instrument, and was followed or ignored as suited the manufacturer.

The Pharmacopeia only partially improved matters, and society transactions continued to contain records of criticisms of the prevailing conditions. So it went on until the organization of the American Medical Association. At its first meeting resolutions were adopted indicating that the question was still a vital one. So, again, in 1849, 1850 and every year or two thereafter this subject was discussed. Then, however, the unreliability of drugs was the source of irritation, the proprietary medicine abuse not yet being so much in evidence. In 1879 we first find the Association recognizing that incipient evil which has since developed into the modern curse—proprietary medicines. In the Transactions for that year we find the following:

WHEREAS, Of late years many drugs and combinations of drugs bearing copyright names have been placed on the market and especially introduced to the notice of physicians, and

WHEREAS, Such drugs and combinations of drugs, having copyrighted names, are advo-

ated in the medical journals of the country, be it

Resolved, That the use of articles thus protected by copyright and the promoting of their use by advertising them in medical journals is a distinct violation of Section 4, Article 1, of that portion of the Code of Ethics treating on the duties of physicians to each other and to the profession at large, and also of Section 4, Article 1, of that portion of the Code of Ethics treating on the duties of the profession to the public and of the obligations of the public to the profession. (Transactions, vol. xxx, 1879, p. 45.)

From this time on scarcely a year passed that the Association did not take action regarding the proprietary-medicine problem, and finally when the Journal took the place of the annual Transactions it became, on account of the advertisements, a very practical question. It is worth recording here that there was a time when our profession opposed proprietaryship in medicines, recently, however, this seems to be accepted as a necessary evil.

IMPOSSIBLE TO DEFINE AN "ETHICAL" PROPRIETARY.

It is unnecessary to give in detail the difficulties connected with the question, or to explain how absolutely impossible it has been to decide what is and what is not an ethical proprietary preparation. It certainly has been a trying question for those editors who have honestly striven to have their advertising pages clean and free from fraud. But long ago it was realized that the problem is one that the physician can not solve by himself. A physician is not supposed to be an authority on pharmacy and chemistry; he is expected to know the physiologic and therapeutic actions of drugs, but not the details of their chemical action or the intricacies of their compounding. This requires a special training and a technical knowledge entirely different from that required for prescribing for the sick.

The pharmaceutical profession bears the same relation to the medical profession that the ordnance department does to the army in the field. The fighting force is not expected to know how to make a rifle, or to have a practical understanding of the manufacture of powder and shot. The men on the firing line know how to use, but not how to make the ammunition. But nevertheless the efficiency of the men at the front is largely dependent on the integrity and honesty of the supplies of the ordnance department.

The trouble has been that the sister professions of medicine and pharmacy have not been co-operating; rather they have been drifting apart.

It was in recognition of this principle that, in 1900 there was published in THE JOURNAL a series of articles, written by a pharmacist well qualified for the purpose, on "The Relation of Pharmacy to the Medical Profession." Their object was to enlighten the profession regarding the conditions with the purpose of leading up to the suggestion of a remedy. As may be remembered, the remedy suggested was the creation of a body of pharmacists, chemists and pharmacologists who should act for the profession and examine the products on the market, or at least take up the subject from a practical standpoint. These articles appeared just before the first Atlantic City session, and some of us had a vague idea of proposing such a board to the general meeting, but the psychologic moment did not seem to have arrived and the matter, for the time being, was dropped.

And so the time went on, the subject receiving more or less attention in the Section on Pharmacology and Therapeutics at each annual session, till at the Atlantic City session, in 1904, the delegates from Michigan presented to the House of Delegates a preamble and resolutions that had been adopted by their State society, which read as follows:

WHEREAS, An exact knowledge of the composition and properties of substances used in the management of disease is essential to a physician's best success:

WHEREAS, Commercial push, by advertisement and drummers, persuades many physicians (often the very elect), to use and commend drugs, mineral waters, artificial foods, etc., etc., of unknown composition and effects:

WHEREAS, As it is impossible for the individual physician to verify the statements of sales agency to separate fact from fancy, he often uses substances quite unlike those indicated, to the discredit of himself and his art:

WHEREAS, The American Medical Association was organized to promote the exact knowledge and intelligent practice of its members:

Resolved, That the Board of Trustees, American Medical Association, is hereby requested to provide for the analysis of medicinal substances of unknown composition and undetermined effects, and to publish promptly the results in the Association Journal.

¹ I am well aware that we should not apply the word "ethical" to an inanimate object. I use it because it seems to be necessary.

Resolved, That the Board of Trustees be requested to appoint a "Journal Clearing House Commission," three in number to serve without salary, with authority to have analyses made in reliable laboratories, by experts of recognized ability, or to equip a suitable laboratory and employ one or more competent experts at a yearly expense not to exceed five thousand dollars.

THE COUNCIL CREATED.

While these resolutions were not finally acted on, some of us realized that the time had at last arrived for something to be done, and for materializing the idea of a board of control. During the next eight months the general plan was discussed with many physicians and with such chemists and pharmacists as Professors Long, Stieglitz, Puckner, Hallberg and others of Chicago, Professor Cushny, of Ann Arbor (now of London), Professor Abel of Johns Hopkins, Dr. Wiley and some of his staff at Washington, Professor Remington, Professor Sadtler, Mr. Wilbert of Philadelphia, Dr. Sollmann, of Cleveland, and others. Several meetings were held, at which a few gathered and the general plan and scope of the work was outlined and discussed in all its phases. The matter was presented in detail to the Board of Trustees at its meeting in February, 1905. After discussing the matter fully the trustees authorized the creation of the board, and specified that it be known as the Council on Pharmacy and Chemistry.

Thus it is that the profession now has at its service a group of men who, for this work, possess special training and technical knowledge. Their energies are devoted to the thankless task of winnowing from the chaff of dishonesty the occasional grain of honesty.

The first meeting of the Council was held in Pittsburg, Feb. 11, 1905. This meeting was an interesting one. To me it was not only interesting, but profitable, for my eyes were opened to conditions the very existence of which I had not before realized. Among these present were practical pharmacists, practical chemists, well trained pharmacologists and physicians. Each group saw things from its own viewpoint, compared notes and exchanged views. As I say, the result was interesting and the revelations both instructive and—humiliating.

The work to be accomplished at this meeting was to lay down certain fundamental principles that should govern the Council in its labors, to devise methods of procedure, etc. The most serious and important phase of the work was the adoption of the rules or principles which should govern the Council

in deciding whether or not a preparation should be accepted.

The first thing an intelligent physician does when he is called to treat a patient is to make a diagnosis of the disease, learn its cause, and remove it if possible. On this principle the Council attacked the problem.

RULE IV.—INDIRECT ADVERTISING TO THE PUBLIC.

It was recognized at the outset that the first objection to proprietary medicines is that the prescribing of such preparations is apt to lead to self-medication by the public and the manifest evils which this entails. The fact that physicians themselves are responsible for at least some of the "patent medicine" business is well known to every pharmacist and to every physician who has given the matter thought. A physician writes a prescription for a proprietary preparation that has a catchy, easily remembered name, and thinks that the matter ends there, but the manufacturer knows better; the patient gets the medicine, and with it all kinds of information regarding its virtues. The physician may instruct that the label, circulars, etc., be removed, but in many cases this is not done, and usually no such instruction is given. The patient learns from the printed matter that that particular medicine is good not only for the disease for which the doctor prescribed it, but for every other real or imaginary ailment with which he may be afflicted. In this way there has been introduced to the public a host of "patent medicines" without a cent of cost for advertising, except that to physicians.

The full directions for use which accompany these medicines are, in part at least, responsible for counter-prescribing by druggists. There is a peculiar fascination—at least to the average pharmaceutical tyro—in posing as a prescriber, exemplifying the old saying: "A little knowledge is a dangerous thing." The "proprietary" nostrum vendors give him the "little knowledge," sufficient, that is, to sell their preparations. He soon becomes familiar with the reading matter and he is impressed, or pretends to be, with the wonderful properties of the preparation as described in the circulars. He adds his recommendation to those of the doctors whose testimonials he shows to the customers on the other side of the counter.

This indirect advertising to the public was the first evil to be overcome, and the first principle adopted by the Council is incorporated in what is now known as Rule 4. It is as follows:

"No article will be admitted whose label, package or circular accompanying the package contains the names of diseases in the

treatment of which the article is indicated. The therapeutic indications, properties and doses may be stated. (This rule does not apply to literature distributed solely to physicians, to advertising in medical journals, or to vaccines and antitoxins.)"

It is this rule that has met with opposition from those who are not satisfied with the doctors' patronage, but want that of the public also. It is this rule that is of most importance to the physician, for its enforcement will check one of the worst evils connected with the proprietary medicine business—that which makes the doctor an advertising medium to the public.

Certain manufacturers oppose it because, they say, the doctor needs the information and the instruction that is given on the labels and in the circulars. The reply is that it is not necessary for the doctor to go to the drug store to learn what a remedy is good for, even though he is one of those who depend on the manufacturer for his knowledge. If a doctor dispenses his own medicine and has to depend on the manufacturer for information regarding its use, let that information be given in the literature not attached to the package.

Medicines manufactured solely for physicians' use, such as the official preparations and those of the National Formulary, are not accompanied with circulars or advertising matter and there is no valid reason why proprietary medicines should be. If the manufacturer wants to enlighten the doctor regarding the value of his preparation, let him advertise in the medical journals; let him send the circulars, or his detail man, to the doctor direct; in any event, there are many ways of letting the doctor know in what diseases the medicine is indicated without putting it on the bottle. It will be noticed that Rule 4 permits therapeutic properties and doses to be given in the literature accompanying the package. Many believe, and with good reason, I think, that the Council has been too liberal in this, that no such information is necessary in that connection.

It has become a recognized fact in the "patent-medicine" field that the easiest and cheapest way of reaching the public is by advertising through the doctor. Let me quote a paragraph that appeared in *Printer's Ink*, an advertising journal, some two or three years ago. The words are those of a "patent medicine" man and, of course, were not directed to physicians:

"But the patent medicine of the future is the one that will be advertised only to doctors. Some of the most profitable remedies of the present time are of this class. They

are called proprietary remedies. The general public never hears of them through the daily press. All their publicity is secured through the medical press, by means of the manufacturer's literature, sometimes gotten out in the shape of a medical journal, and through samples to doctors. For one physician capable of prescribing the precise medicinal agents needed by each individual patient there are at least five who prescribe these proprietaries. They are the chief standby of the country practitioner. * * * * Three-fourths of all the prescriptions received are for these proprietary remedies, and the pharmacist simply opens the package and writes a label, "A teaspoonful three times a day before meals." * * * The original bottle is given to the patient. He sees that the remedy does him good, and when he feels a trifle run-down again he goes to a drug store and buys another bottle, not troubling the doctor. He meets a friend on the street who is not looking well. "I know exactly how you feel," he says. "Now just go buy a bottle of ———. Best thing in the world. My doctor prescribed it for me, so it isn't a 'patent medicine.' " In this way the name of the remedies advertised to physicians get abroad to the general public. * * * * The proprietary medicine of the future, though, will be advertised through these channels. The medical papers will reap the harvest and the physician himself, always so loud in the denunciation of "patent medicines" will be the most important medium of advertising at the command of the proprietary manufacturer. In fact, he is to-day,"

Have you ever seen an arraignment of this evil by its enemies which equals this cynical statement of its friends?

Is it necessary to say more on this point? In fact, can anything more be said? What I have just quoted should be read by every nostrum-prescribing doctor in the country, and, having read it, he should go to some quiet corner and kneel down and pray the Lord to give him a little common sense.

Now, while I am quoting, let me quote something else. This is from a book written by Mr. George P. Rowell, entitled "Forty Years an Advertising Agent." Mr. Rowell, as some of you may know, dabbled somewhat in the "patent medicine" business himself. He is the one who created Ripans Tabules. In this book, by the way, he tells how he came to put this preparation on the market. In the chapter from which I shall quote he describes the "patent medicine" business in an interesting way, and tells of the fortunes that have been made and also lost. He has this to say about an "ethical" proprietary that

some of you may have heard about:

"We had a successful advertiser in Halifax, N. S., who sold a medicine known as Fellows' Hypophosphites, that proved so good that some shrewd business men in the medicine trade, who knew about it, bought the trade-mark, incorporated a company with a capital of \$100,000, retained the original owner as manager, stopped all advertising except in medical journals, and thereafter pushed the sale only through the medical profession. I had information at one time of a young man who was heir to an uncle, recently deceased, and had come into possession of a certificate of stock in this company, of the face value of \$6,000, and made up his mind that, shrewd as the old gentleman was, he had, without doubt, acquired trash in this instance; and I heard further, that the young man began to think better of the doubtful asset, when one day a dividend check came; and when, at the end of the year, he realized that within the twelvemonth that \$6,000 certificate had brought him \$9,000 in dividends, he began to revise his estimate of his deceased uncle's prescience in making investments."

As a "patent medicine" it was not a success, but as an "ethical proprietary" it has been proving a gold mine. So, since that time his medicine has not been advertised except to doctors through medical journals, has it? Look at the wrapper around the bottle, read the label on the bottle, notice the name blown into the bottle, and then will you doubt the statement of the average druggist when he says that nine-tenths of Fellows' Hypophosphites is sold over the counter direct to the public and that the doctors are responsible? What better method of advertising? And how easy! Newspaper advertising is expensive! It is cheaper to use the doctor.

The principle incorporated in Rule 4 is one of the most important principles adopted by the Council. It threw out at once three-fourths of the proprietary medicines on the market. For is it to be supposed that the promoters of Fellows' Hypophosphites, Gray's Glycerine Tonic, Glycethymoline, Antikamnia, Antiphlogistine, Phenalgin, Santal Midy, and most of the self-styled "ethical" proprietaries would conform to Rule 4? From their standpoint the proposal is absurd.

RULE I—NON-SECRECACY.

Everybody, that is, *nearly* everybody, agrees that a physician should know what he prescribes. Some intimate that he has no moral right to give a medicine unless he knows what he is giving. A few emphatically express the view that it should be made a criminal offense for a physician to give a pa-

tient a medicine when he does not know exactly what it contains. I must acknowledge that I am much tempted to side with the latter. In any event, after agreeing on Rule 4, the Council again went back to the general principles, and adopted the following, which is known as Rule 1:

No article shall be admitted unless its active medicinal ingredients and the amounts of such ingredients in a given quantity of the article be furnished for publication. The general composition of the vehicle, its alcoholic percentage, if any, and the identity of other preservatives, if present, must be furnished.

There was little discussion when this rule was under consideration. Even the verbiage was soon agreed to. It is so palpably consistent, so absolutely fair and just that one would have imagined that it would receive universal approval. But do you remember the protests of certain medical journals when the first announcement was made and these rules published? It was simply outrageous, we were told, that enterprising firms which had spent money and time in getting up a fine combination should be asked to state what the combination contained. One New York medical journal even went so far as to send a circular letter to the manufacturers offering them space in its columns for an expression of their views in regard to the outrageous attempt that was about to be made to injure their business. Certainly this attack on vested interests was scandalous, and it was a good thing that the proprietary people were so well guarded by a journal that is published in the interests of physicians.

But the proprietary gentlemen were too wise: they did not accept the offer, since nothing appeared from them. In fact, the majority of the nostrum men have said that they always have been, still are, and always will be willing to tell physicians what their preparations contain. They agree that physicians should know what they are prescribing, that it is very necessary they should know.

It would be wrong, indeed, if physicians should prescribe without knowing what they are prescribing, say these gentlemen. Surely! And the more quackish the preparation and the "company" that exploits it, the more willing they are to give a formula. Mind you, I say "a" formula.

When some twelve years ago the Board of Trustees ordered that no proprietary should be advertised in *THE JOURNAL*, unless the advertisement was accompanied with a formula sufficiently often to let the reader know of what the preparation consisted, they imagin-

ed that they had done away with the evil—secrecy. And this has been the cry since—publish the formula and the preparation becomes ethical. It did not seem to dawn on those who were especially interested in this subject that connected with the exploitation of the proprietaries were most extravagant claims as to their therapeutic value, and that those who would make misstatements regarding the therapeutic action of their preparations would not hesitate to stretch the truth when they made statements as to the composition. The formula was the thing. If the formula was forthcoming, the preparation was ethical. But it was developed that the more fakish the nostrum the more willingly was the formula furnished. So it is not strange that there were admitted to the advertising pages of *THE JOURNAL* such fakes as Ammonol, Phenalgin, Labordine, Campho-Phenique, Salacetin, Hagee's Cordial of Cod Liver Oil Compound and Tyree's Antiseptic Powder.

The idea that the publication of a formula will make a preparation ethical has been harped on and emphasized until many believe it. Now the fact is most of the proprietary mixtures are simple combinations of well-known drugs that any pharmacist, or even an average physician, could compound if the active ingredients were known. Therefore, would not the makers of such preparations be very foolish to give the correct formula even as to the active ingredients? Surely, they would be, and the average nostrum maker is not a fool?

I presume it is unnecessary to say that the Council is not satisfied with "a" formula, but demands "the" formula.

RULE 6.—EXTRAVAGANT THERAPEUTIC CLAIMS.

The man who has something to sell naturally wants to impress the prospective buyer with all its good qualities. This is business—honorable business. Incidentally, in the business world it is expected that the seller, while emphasizing all the good qualities, will tell the truth. An exception to this rule may be made to the horse-trader. He, proverbially at least, is expected to overstep the bounds of truth in his comments on the quality of his animal. But the other gentleman knows this and discounts his statements accordingly. He examines the animal, or if he thinks himself deficient in the necessary knowledge to pass judgment on the value of a piece of horse flesh he gets the advice of a friend who has this knowledge.

I admit it is rather far-fetched to compare horse-trading with a proprietary medicine business, but there does seem to be a similarity—and also a difference. The sell-

er in both instances is given to a slight exaggeration as to what the respective articles will do in their respective spheres of action, but in one case the buyer, at least as a rule, takes it for granted that the seller is likely to stretch the truth. At least, he is healthily skeptical about the matter and does not believe all that the horse-trader says. In the other case the buyer, to borrow a simile from another department of life's activities, is quite likely to swallow not only the bait, but the tackle also. Perhaps he is not so much to blame after all. It is a little difficult for honest physicians to realize that others traffic in human life.

The claims in the advertisements of "patent medicines" are so absurdly extravagant that a "patent medicine" advertisement has become synonymous with mendacity. In too many instances this also applies to advertisements of so-called "ethical proprietaries." There is no limit to the license allowed those who write the advertising matter that is to influence physicians to use the products advertised.

To repeat again, there seems to be something connected with the "patent" and proprietary medicine business that demoralizes. An honest, conservative statement about the merits of a proprietary preparation is as rare as are sweet violets in Iceland. As regards the large majority this is not to be wondered at. To tell the truth about either their composition or their therapeutic value would be to stop their sale. But there are proprietary medicines that have merit and that would be used even if the simple, unvarnished truth were told about them, but the habit of exaggeration crops out in the advertising of even these.

This was one of the evils recognized and so Rule 6 was adopted, which says:

No article will be admitted or retained of which the manufacturer or his agents make unwarranted, exaggerated or misleading statements as to therapeutic value.

Of course, the principle underlying this rule is so elemental that one might think that it would meet with no opposition when put into practical application. Yet its actual enforcement has caused much trouble in spite of the fact that there has been a liberal interpretation of the literature. The diversity of opinion and varied experience in the use of therapeutic agents has been recognized and the Council has admitted every reasonable claim, everything short of absolute misstatement and palpably false pretension.

OTHER RULES.

The three rules above considered meet the most objectionable features of proprietary-

ship in medicine. Indirect advertising to the public through the physician, secrecy in composition and false therapeutic claims. The enforcement of these three rules would do away with the main evils connected with the proprietary business, and incidentally would wipe out a goodly number of the products. The other seven rules, while important, some of them being necessary for the enforcement of the three already referred to, need but a brief reference here.

Rule No. 2 is: No chemical compound will be admitted unless sufficient information be furnished regarding tests for identity, purity, and strength, the rational formula or the structural formula, if known.

There are many preparations on the market, both domestic and imported, that are claimed to be definite chemical compounds, but which are not. This rule guards against such, as well as against adulteration, etc. No objection has been made to this rule.

Rule 3 says: No article that is advertised to the public will be admitted; but this rule will not apply to disinfectants and food preparations, except when advertised in an objectionable manner.

This rule, of course, refers to open, direct advertising to the public, in the public press, etc. It is not necessary to defend this rule, before physicians at least. It provides for conditions entirely different from that covered in Rule 4.

Rule 5 is: No article will be admitted or retained concerning which the manufacturer, or his agents, make false or misleading statements as to geographical source, raw material from which made, or method of collection or preparation.

The proviso in this rule is incorporated in the national Food and Drugs Act and needs no comment.

Rule 7 says: Labels on articles containing "poisonous" or "potent" substances must show the amount of each of such ingredients in a given quantity of the product. A list of such substances will be prepared.

This rule is not really necessary since the passage of the national Food and Drugs Act covers many of the substances referred to.

Rule 8 is as follows: If the trade name of an article is not sufficiently descriptive of its chemical composition or pharmaceutical character, or is, for any other reason, objectionable, the Council reserves the right to include with the trade name a descriptive title in the book. Articles bearing objectionably suggestive names will be refused consideration.

The last sentence was not in the original draft; experience showed the necessity of such a rule. I doubt if any one will think

this an unwise precaution when we run across such names as: Gonosan, Gonorin, Gonoral, and Gonol, names certainly suggestive enough even to the most ignorant layman, and remembered without difficulty by those who wanted to tell their fellow-sufferers what they were taking. Genitone, Vaginal, Oöphorin, Virilin, Rheumasan, Bronchitin, Pneumin, etc., are others. I am not quoting fanciful names from the "patent medicine" list; they are all advertised to physicians as scientific preparations.

Rules 9 and 10 merely require information regarding the copyrighted name and, if the article is patented, the number and date of the patent. They are as follows:

Rule 9: If the name of an article is registered, or the label copyrighted, the date of registration and a copy of the protected label should be furnished the Council. In case of registration in foreign countries, the name under which the article is registered should be supplied.

Rule 10 states: If the article is patented—either process or product—the number and date of such patent or patents should be furnished.

These rules were adopted in a tentative way at the Pittsburg meeting. In the following September the Council met at Cleveland and to that meeting were invited representatives of the various branches of manufacturing and importing interests for consultation and suggestion. The various rules were discussed and only slight modifications were made. The only rule that was objected to by the manufacturers' representative was Rule 4, but all who took part in the discussion acknowledged that the principle underlying the rule was a just one and would work no hardship on those manufacturers who were catering to physicians only.

At the Pittsburg meeting it was decided that when it was necessary for the manufacturer to change the labels, circulars, and other advertising matter, he should be given ample time in which to comply so that he might not experience undue expense or hardship in meeting the requirement. At the Cleveland meeting this time was extended indefinitely until July, 1906. Thus, previous to July, 1906, the Council accepted preparations even though the labels, literature, etc., might not have been in accord with the rules, on the promise of the manufacturer to make the necessary modifications in a reasonable time. However, since July 1, 1906, the literature, labels, etc., must be correct before the preparation is accepted.

I have discussed these rules at length so that you may know what they are and what

they mean. Together they give, what has never been given before, a definition of the term, "an 'ethical' proprietary medicine." Is it satisfactory? Together they make the standard by which the Council judges proprietary medicines. Is the standard too high?

PROCEDURE.

As the members of the Council are scattered, meetings, except at rare intervals, are impracticable. The method of procedure, however, is simple, communication between the members being through a bulletin prepared and sent to each member by the secretary every Thursday. In this bulletin are arranged systematically the reports, motions, comments, discussions, etc., the matter being indexed so that ready reference to all past work is at hand for each member.

The Council is divided into three different divisions—chemistry, pharmacy and pharmacology. Articles are assigned to a subcommittee usually consisting of but one member for preliminary report. This subcommittee consults with other members, with outsiders, and, if thought advisable, makes or has made chemical analyses of physiologic examinations. If the subcommittee desires to communicate with the manufacturer, the correspondence is conducted through the secretary of the Council, the identity of the subcommittee not being divulged.

When ready the report is placed in the Bulletin, together with such correspondence or other matter that the subcommittee may think necessary for the guidance of the members in arriving at a conclusion. The report may be preliminary or final. If preliminary, suggestions and advice are asked. If final, the article is recommended for either Class A, B, C or D, and reasons given for the recommendation. When the final report is made, it is before the whole Council for action. If the article is put in Class A, it means acceptance; if in Class B, more definite information regarding the composition is wanted; if in Class C, certain modifications in the literature are required, and, if in Class D, it means refusal of recognition.

The assignment of an article to Class A or Class D is not necessarily final. If an article which has been voted to Class A is later found to conflict with the rules, the action of the Council may be reconsidered. Similarly, an article voted to Class D may again be taken up and finally accepted if it is found that it has been made to conform with the rules.

Many manufacturers, believing that the publication of certain information in regard to their products would detract from their value, have often volunteered to furnish in-

formation for the private use of the Council. The Council, however, does not receive trade secrets, but insists that all information it receives may be published at its discretion. The Council desires information for the profession, and not for itself alone.

CHEMICAL EXAMINATION NOT ALWAYS MADE.

It is needless to say that the Council does not make chemical examinations of every remedy. Such a task is manifestly impossible. If the authors of text-books on physiology, on anatomy or on practice, were to verify every statement they made, such works could not be completed in a lifetime. Instead, the authors, by virtue of their general knowledge of the subjects on which they write, select the truths as they see them. These, finally presented in the form of a text-books, are again accepted as truths by students, because they believe that the author was competent to select from the mass of literature at his command those statements which were most probably true. In the same way the Council has attempted to prove or disprove statements which seemed questionable, while it has accepted those which, from its general knowledge, were believed to be true. In this matter it is needless to say that the Council has been inclined to accept statements made by firms or persons known to be reliable and responsible, while it has been inclined to examine more closely the statements made by irresponsible parties, or by those who seemed to be inclined to exaggerate.

FORMULA NOT ALWAYS RELIABLE—EXAMPLE.

At first it was supposed that the statements of all the legitimate manufacturing firms could be taken without question. This supposition, however, was not well founded, and it is here that some of us have been sadly disappointed. We supposed that it was only the pseudo-chemical concerns, those which are not in the legitimate manufacturing pharmaceutical business, who were the offenders, but in this we were mistaken. Even the regular manufacturing concerns have among their specialties preparations that are as fraudulent as are any put out by the typical nostrum vendors. One old-established house for years has had on the market a surgical dusting powder, which it advertised as a definite synthetic chemical compound, the result of great scientific research. The published formula was worded to mystify, and extravagant claims were made for the product. Our chemists showed that this wonderful preparation was a mixture containing approximately 70 per cent. of boric acid, 20 per cent. of acetanilid, with a little thymol, bismuth, cinchonin and salol. This is by no means an isolated case, but fortunately for one's faith in

business integrity there are at least some firms that to physicians as scientific preparations.

COUNCIL DOES NOT RECOMMEND USE OF ARTICLES
ACCEPTED.

The acceptance of an article does not mean that the Council recommends it; this is emphasized by printing the following disclaimer with every publication of accepted articles:

The Council desires physicians to understand that the acceptance of an article does not necessarily mean a recommendation, but that so far as known it complies with the rules adopted by the Council.

At the inception of the work, it was decided to adopt an extremely liberal policy and to accept a preparation that met the requirements, even though it might not be considered of any great therapeutic value, or as representing anything new or important from a chemical or pharmaceutical point of view. Later, when the Council obtains the fuller cooperation of the profession, a higher standard may be adopted for acceptance. In sifting the wheat from the chaff it is sometimes advisable to have a course enough sieve to let a little chaff go through, but later on it may be desired to have the pure wheat without any chaff; then the sieve must have a finer screen.

It is presumed that physicians will think for themselves and use their own judgment regarding the therapeutic value of the preparations accepted.

THE BOOK—NEW AND NON-OFFICIAL REMEDIES.

We have been speaking of "accepting" or "approving" preparations. Accepting for what? Approving for what? Not for the advertising pages of *THE JOURNAL*, as some have seemed to imagine. It would be absurd to go to the trouble and expense for such a purpose. In a sense, the Council is compiling a book, and acceptance of an article means that it is accepted for inclusion in this book. It will be known as "New and Non-Official Remedies," and will represent the actual tangible evidence, or result, of the Council's work. It will contain a description of those proprietaries which have been approved, together with such non-proprietary drugs as have come into more general use and are not as yet in the Pharmacopeia. Is it necessary to present argument to prove that such a book is needed? Heretofore there has been no book, in this country at least, that a physician could turn to for information regarding non-official preparations. Every day a physician in active practice reads, sees mentioned in his medical journals preparations about which he knows nothing. But he wants to

know. Where shall he look? They are not mentioned in the Pharmacopeia, in the National Formulary nor in but few, if any, of the standard text-books on materia medica. Heretofore he has had only one satisfactory source of information, if it is a proprietary—the manufacturer. And the information he will receive from him will most likely be voluminous, but too partial for unquestioning acceptance. Why not make it unnecessary for such an inquirer to depend entirely on biased information?

This book will tell him what the preparation is, what is claimed for it, the dose, where it can be obtained, and whether patented or trademarked. It will give him the most favorable information consistent with truth, quoting even the claims of the manufacturer, if they are not too optimistic. But it will tell him what will not be found in the literature sent him by the manufacturer—it will inform him if it is liable to have untoward effects, etc. It will, in short, supply him with information that is uninfluenced by commercialism.

It will be supplementary to the Pharmacopeia, and will contain preparations that later will become official, as, for instance, the various patented products which, because they are proprietaries, are not usually admissible to the Pharmacopeia. The last revision of the Pharmacopeia contained preparations that, while in general use by physicians at the time, did not appear in the former edition. In 1893, for instance, phenacetin was in general use, but it did not appear in the Pharmacopeia issued in that year. If this preparation, which is now official as acetphenetidin, is a good thing to-day, it was then. There are a number of such preparations already accepted that will probably be in the next Pharmacopeia.

BOOK NOT LIMITED TO PROPRIETARY ARTICLES.

At the beginning it was intended to include in the book only proprietary articles, but time and experience have shown the need of including more than these. New drugs are continually being added to our therapeutic armamentarium that are not in the Pharmacopeia. For instance, a little while ago phenolphthalein, long in use in laboratories, etc., as an indicator, was discovered to have purgative effects, and clinical use seems to demonstrate that it may have certain advantages over other aperients. In fact, it is already on the market under various proprietary names, as purgen, purgen konfekt, purgatol, purgotin, laxironfekt, laxine, el zernac, etc. The Council has decided to include this in the book. Thus physicians will be able to learn what phenolphthalein is at the outset and will

not be deceived for years into using it under various fanciful names and at many times its cost. But, above all, they will not be misled by the extravagant claims of commercial interests.

Hexamethylene tetramine had been known before its value as a urinary antiseptic was discovered; then it was put on the market under various trademarked names. At the present time the Council would undoubtedly accept this for the book, with a description, and we would not be bothered with a dozen or more different names for the same article. Incidentally, I hoped a less cumbersome name would have been given the preparation than was adopted by the Committee of Revision of the Pharmacopeia. Four trade names for hexamethylenamin already have been accepted, but this is done not to encourage many names for the same thing, but to furnish information. Thus a reference to the book will disclose that Urotropin, Formin, Methaform and Uritone are different manufacturers' names for hexamethylenamin.

The permanent addition to our *materia medica* of really meritorious articles has been slow, extremely slow; but the elimination of those without merit has been still slower. And, what is of more importance, this elimination has been achieved at the loss not only of money, but possibly even of human lives. The indiscriminate and unscientific drug experimentation that has been carried on by physicians at the behest of commercial interests and without any knowledge except that furnished by such interests is not creditable. It is hoped that this book will check this, to some extent at least.

BOOK WILL BE AN ANNUAL.

The idea is that this book will be issued as an annual, each revision to include the addition of new drugs and proprietary articles that are deemed worthy of admission; those that for good and sufficient reasons should be omitted will be left out. The descriptive matter will also be modified as may be found necessary from the developments of the year. Manufacturers are slow to call attention to untoward results. It will be the function of the revisers of this annual to incorporate both the favorable and the unfavorable.

Personally, as one who has had experience in general practice, I know that it will be of immense value. Heretofore there has been no way for the conscientious practitioner, the medical writer or the editor to differentiate the true from the false. For these the book, "New and Non-Official Remedies" will furnish a reliable guide.

While I have spoken of this book as of the future, the fact is the first or preliminary edi-

tion was issued some six or eight weeks ago. This, however, is simply a reprint of the articles as they appeared in *THE JOURNAL* and is issued for two purposes: To invite criticisms and suggestions, and, what is more important, to furnish even now a book of reference for those who want to support the Council in this movement by using only such preparations as have been approved. Another similar edition will be issued shortly, slightly modified with an index and more information than appears in the first reprint; and of course, it will include the articles that have been accepted since the first edition was printed. It is probable that two or three editions of this preliminary report may be issued before the official book is published.

CANNOT PUBLISH BLACKLIST.

It has been suggested that the Council print a list of the preparations that have been refused recognition, since there are many who have intimated that they would not prescribe or recognize in any way the rejected articles. This is impracticable: First, because the number is too large; second, because the Council hopes that some may reform or be withdrawn without necessitating a resort to extreme measures, and, third, because it might and undoubtedly would involve us in lawsuits. A blacklist is not a safe thing to make public.

The Council is publishing from time to time reports condemnatory of preparations, with comments, but this has to be done with great caution; every statement must be verified or injustice might be done. Further, the function of the Council is to approve rather than to condemn. When it does condemn and publishes its condemnation, it is for a specific purpose, that purpose being to educate physicians by presenting concrete examples of the way they are being imposed on.

CHEMICAL LABORATORY.

A chemical laboratory has been established in the Association building and is in charge of the secretary of the Council, Professor Puckner, and an assistant. While it is not possible to do a large amount of chemical work in this laboratory, it will be of great advantage in many ways.

In connection with the movement much information relating to the general subject has been gathered. This has been classified, indexed and made available for the future. This, in fact, is one of the important features of the work being done in the central office. In the past considerable matter has been published showing the fraudulent character of products manufactured not only in this country, but in Germany and abroad general-

ly. Such matter has usually been published in drug or chemical journals and has never come to the attention of physicians—the very ones who should have been informed.

The important drug and chemical journals of the world are taken for the laboratory, and the information obtained from them is most valuable. It is needless to say that hereafter physicians will be informed of matters which concern them that appear in this class of journals.

In connection with the laboratory is an information bureau, in one division of which advertising literature has been collected and classified. This includes booklets, circulars, advertisements and write-ups in medical journals, etc., covering the last five years. The exhibit is interesting and instructive for those who want to make a study of this nostrum business, and will furnish texts for future sermons in the propaganda for common sense in therapeutics.

Another division directly related to the above is a card index of those who have given testimonials or furnished write-ups of proprietary preparations. These cards are made up in great part from the matter on file. This division also is most interesting. While it contains the names of a few excellent men, the great majority are hardly known in their own locality, and yet their opinions are accepted without question by intelligent, well-educated practitioners. Some seem to have a habit of giving testimonials for all kinds of things and it requires considerable space to record the references. It is encouraging to note that this exhibit is not growing so fast as it was. Evidently, testimonial giving is not so popular as it was previous to a year and a half or two years ago.

It is well known that while the *name* of a product does not change, the *composition* of the product may, and does. To be able to show this in the future, samples of many proprietaries are preserved, with date of receiving, etc.

COOPERATION OF OTHERS.

One favorable development is the cooperation of other workers in similar fields. A number of chemists in universities, schools of pharmacy, etc., have volunteered to assist, and it is expected that in the future the aid of such men will be of great advantage in solving questions on which they are especially well qualified to pass. Several state and municipal boards of health are doing good work, and exchange of information with these is now a feature. This promises to develop in the future to the mutual benefit of these boards and the Council. It is hoped, in time, to interest teachers in medical colleges; such

help is sorely needed.

The advantage to the Council of having as members Dr. Wiley, chief of the Bureau of Chemistry, and Dr. Kebler, chief of the Drug laboratory, has been very great, for it has received not only their personal aid, but also material assistance from the departments with which they are connected. In fact, without the aid of these laboratories some of the work done would have been impossible. The profession is also under great obligations to Surgeon-General Wyman, who permitted Dr. Reid Hunt to serve as a member of the Council. Through Dr. Hunt's connection with the Hygienic Laboratory of the Public Health and Marine-Hospital Service, and with the permission of Surgeon-General Wyman, it has been possible to refer certain intricate problems to that laboratory that would otherwise have been difficult of solution.

FOREIGN COOPERATION.

Another promising feature is the fact that the Council is getting in touch with workers abroad. For instance, splendid work is being done in Berlin, especially in the investigation of the synthetic chemical compounds under the auspices of the German Apothecary Society. This is directed by Professor Thoms of the Pharmaceutical Institute of the University of Berlin, a chemist of international standing. Correspondence with Professor Thoms has been carried on for some months, and he has offered to assist the Council whenever possible. At the request of the Council, the Board of Trustees of the American Medical Association has just elected him a corresponding member of the Council.

Professor Cushny of the University of London has been a corresponding member since he left this country soon after the Council was organized.

It is hoped very shortly to get similar foreign correspondents in Paris, Switzerland and in other countries. Such cooperation will be of great assistance in dealing with foreign products.

One of the conditions which the Council has had to meet is the exploitation of foreign goods by American agents who advertise them, sometimes innocently, under claims that are not accepted abroad. In some instances products had been sold abroad under claims regarding the composition that were shown to be false. Over there the manufacturers were compelled to modify their statements, but the old claims are still being made here. The Council has already secured a modification of the literature relating to certain foreign products by calling the American agents' at-

tention to the fact that if such modifications were not made the actual facts regarding the preparation would be published.

A large number of preparations made here are advertised as being made abroad. Further, some are made abroad for the American market that have absolutely no sale in the country in which they are made. In due time evidences of these facts will probably be given to the profession.

I have given a brief review of the conditions which led to the organization of the Council, have outlined the principles or rules by this proprietary articles are judged, and have spoken of the mode of procedure. I have not told you of the difficulties the Council has encountered, and I think this hardly necessary, for I am sure all know without being told that these difficulties have been very great.

CONDITIONS ALREADY IMPROVED.

The work has been going on for a little over two years. To all appearances there are just as many nostrums on the market and the advertising pages of certain medical journals are just as well filled with this class of medicines—in fact, if the truth must be told, better, and for reasons that should be evident. But in spite of this apparent evidence of prosperity, if one looks beneath the surface, one will find that change has taken place. There has been a gradual decrease in the number of write-ups of proprietaries; there is evidence that physicians are thinking, that they have developed a healthy skepticism and no longer believe all that is told them about the wonderful cure-alls they are asked to prescribe. The detail men do not have such willing and credulous listeners. There has been a remarkable falling off in the sale of “ethical” proprietaries, especially those of the typical nostrum type. This is common knowledge to those in touch with the trade. A comparison of the catalogues of some of the manufacturing houses in circulation two years ago with those of to-day will reveal the fact that not a few of the “specialties” are missing. And the descriptive matter, formulas, etc., of many others are different from what they were. A part of this is explained by the National Food and Drugs Act, but only a part. Many of the changes had taken place before this law was passed.

The influence of the Council in this connection has been greater than will ever be known. The knowledge that our profession is at last awake, that it has a body to expose the frauds that may be imposed on physicians has aroused some of the manufacturers at least to realize that old conditions have changed. The advertising literature is scrutinized more

carefully; positive cures for incurable diseases are not so common.

“WHAT ARE YOU GOING TO DO ABOUT IT?”

This much has been accomplished; and yet what does it amount to compared with what must be done before American medicine is rid of the nostrum blight? The work has really just commenced. The exposes that have been made and the publication of facts regarding the nostrum business have made a large minority of the physicians think. But it is evident that much more must be done to arouse them to act. And this brings us to the question, “What is the profession going to do about it?”

The Council is purely an advisory body: there is no national, state, county, city or any other law that will compel the manufacturer to recognize it or comply with its requirements. Hence, without the support of our profession its work will be of no permanent value. But this must be more than a passive support. Simply endorsing the work by words, by commendation or by that indefinable something called moral support, is well enough so far as it goes. But if definite, permanent, tangible results are to follow, the profession must act. If the profession does not act and does not back up this movement, rest assured we shall in time drop back into the old conditions, or into even worse.

HOW THE PHYSICIAN CAN HELP.

This movement was inaugurated directly for the benefit of the medical profession, and indirectly for the benefit of the public. There is no question as to the final success of the propaganda, but the work will be greatly facilitated if you who are interested will:

First.—If you use proprietaries, secure the list of approved preparations and, all things being equal, give those in the list preference in prescribing. This list, with a description of each article, costs but a few cents; without the description it can be had for the asking.

Second.—Write to those whose preparations you are using and ask if the articles have been submitted to the Council; if submitted and refused recognition, why? and if not submitted, why not? Bear this in mind: The manufacturers will recognize the Council and ask to have their controlled products placed in the book if physicians insist that they desire this; otherwise, they will do neither.

Third.—Ask detail men who call if the preparations represented have been approved by the Council, and if not tell them that until this has been done you do not care to take time to examine the product.

Fourth.—Look over the advertising pages

of the medical journals you are supporting—editors and publishers have great respect for the opinion of their subscribers—and write and ask for a square deal in the advertising, as well as in the reading pages.

Will it be out of place for me to suggest here that the members of the Council have a right to ask for your support, when they are working absolutely without pay? Is it presumed that they will keep on indefinitely and submit to jeers and sneers if those whose interests they serve do not themselves do their share?

I am sure that every intelligent physician, unless he has some interests on the other side, believes that the movement is a good one, and deserves all the support the profession can give it. I am also sure that every one of you believe this. But—what are you going to do about it?

Let me repeat: Moral support alone will not win this battle.

ORIGINAL ARTICLES.

A DESERVED HONOR TO LOUISVILLE'S "GRAND OLD MAN."

Remarks of L. S. McMurtry in presenting a loving cup to Dr. William Bailey in behalf of the Louisville Medico-Chirurgical Society, on the completion of fifty years in the practice of medicine, May 31, 1907.

Dr. Bailey:—It is known to us that this time marks the completion by you of fifty years in the active work of our profession. It has been suggested that this occasion should not be permitted to pass without some expression of congratulation and appreciation on the part of the fellows here assembled. This happy suggestion was greeted with enthusiastic and unanimous approval, both spontaneous and hearty. It is a beautiful custom of our guild, observed in all civilized countries, to celebrate in appropriate manner the rounded period of many years honorably devoted to science and humanity. It is therefore by the authority, and in the name of the Fellows of the Medico-Chirurgical Society, that I beg leave to speak a few words to you and of you and for you.

A half century in the active practice of medicine! Who that has trod that path for even a brief period can fail to recount the trials, the struggles, the anxious hours, the labor and fatigue by day and night, the failures, the triumphs, that are blended in ever-varying degrees in such an experience? During these years you have been always active. Not only attending to your practice assid-

uously, but contributing always to the progress and diffusion of professional knowledge. The transactions of our State society show that thirty years ago you were a regular contributor at the annual meetings. In this society you have been a constant attendant, participating in the discussions, ever since it became my good fortune to be enrolled among its fellows. The American Public Health Association a few years ago acknowledged your eminent attainments in public hygiene by electing you to its highest office.

For quite thirty years you gave constantly of your time and talents as a teacher of medicine. In two of our medical schools you taught with exceptional ability the important departments of practical therapeutics and internal medicine. Hundreds of young men sat under your instructions in these important branches of medical science, who are now applying at the bedside the principles you faithfully inculcated.

As a member of the State Board of Health of Kentucky you have rendered invaluable service for years to the people and to the medical profession of the State. Among the achievements of that Board in which you have actively participated was the difficult task of driving all forms of advertising quackery from the State.

While these distinguished public services have necessarily commanded the esteem and respect of your professional associates, in my humble opinion your greatest professional recognition has been as a consulting physician. For years past your colleagues have turned to you for counsel in critical and responsible cases of disease, and have used freely that knowledge which comes only from prolonged study and clinical experience. They have not only received for the patient's benefit that knowledge, but there is not one of them that does not know that his own professional reputation and his personal interests were always safe in your keeping.

In the charities which our profession so freely dispenses you have been prodigal. Every one familiar with your life and work can attest that you never oppressed any one, and that you have always responded to the distressed appeal of the unfortunate.

The occasion will permit allusion to one distinguishing feature of your work. It came to pass after you were fifty years of age that the entire science and practice of medicine was revolutionized. Standard textbooks became obsolete, and all pathology was recast within a few years—the results of the marvelous discoveries in bacteriology and

the development of specialism. It is more difficult to unlearn than to learn. You aligned promptly with the advanced column; after careful study you embraced the new teaching, and gave your influence to upholding the new methods. You were among the first physicians in this city to utilize surgery in the successful treatment of hitherto incurable medical diseases, thus exhibiting a logical appreciation of revealed science in its practical application. Such a course required both knowledge and courage.

Through all these years, while holding prominent place as practitioner, teacher and public official you have borne yourself with a modesty as beautiful as it is rare in these days, when self-assertion and aggressive egotism are common means of selfadvancement.

But I must not detain you too long. We want to offer you at this fiftieth milestone our congratulations. We want to express to you our appreciation of your work and our esteem and affection for you as a friend and associate. As a memorial of this occasion, and in testimony of these sentiments, you will permit me in behalf of the Fellows of the Medico-Chirurgical Society to present to you this loving cup.

In Tennyson's beautiful poem, the Lotus-Eaters, we are told of a land where it is always afternoon. It is our hope that your home may henceforth be as if in that land, and that the afternoon of your life may be long. And when the eye rests upon this cup, we would have it signify to you and your noble wife, and your children, and your children's children that, in the judgment of those who know your life work best, you have added to distinguished professional achievements a pure and unselfish life, filled with kindness and honorable deeds.

Dr. Bailey, I have done.

TYPHOID FEVER; ITS CAUSES AND PREVENTION.*

BY G. G. THORNTON, LEBANON.

If you will pardon the seeming egotism I will promise you that in this short paper I shall do no compiling, but give you a few thoughts which I have gathered from various sources, by reading, observing, and meditating. The cause, the seed so to speak is generally believed to be the bacillus of Eberth. The germ must be introduced into the

human body and find lodgement and a place suitable for business, that place being Peyer's patches and the business being multiplying and generating the toxin, which being absorbed gives rise to the symptoms, the malaise, the aching, the tired, lazy feeling, the disturbance of the nervous system, the fever, etc. More than this, in my opinion, we not only have to have the germ and the Peyer's patches, but there must be a suitable condition of the stomach and alimentary canal for this germ to thrive till it can reach the patches if it goes by that route. This germ has been found in other organs and tissues of the body and it therefore, looks probable that it might be inhaled into the lungs and carried by the circulation to the desired haven—Peyer's patches. No doubt exists in my mind that most of our people have swallowed or inhaled the typhoid and tuberculosis germ in numbers over and over again, and yet have had neither disease because the system or the stomach and bowels were in such a condition as not to allow the invading germs to gain a foothold on suitable soil. Just what effort nature makes and how far she succeeds in warding off this disease we may never know, but that she does always make some effort I feel sure. That this effort of hers can be assisted by proper care of the individual, looking towards keeping him in perfect health, giving him regular sleep, not allowing him to be overworked, looking after his secretions and excretions, thereby preventing auto-intoxication, which often stimulates and complicates his disease, and acts as one of the causes which serves to weaken nature's defenses, thereby giving the specific germ an opportunity of invading the body while nature has withdrawn her forces to ward off another less dangerous and insidious though a more threatening foe. Those things which tend to lower the vital powers have a tendency to weaken the resisting powers. Possibly were man back in his primitive condition he would be entirely immune to not only typhoid fever but to all other diseases. The number of germs that enter the alimentary canal in a given time have something to do with whether a given individual becomes the subject of this disease or not. We find on post mortem different patches in various stages, from those of invasion to that of cicatrization, thus showing that they were infected at different times, probably the infection taking place in the gland and spreading from one gland to another, this going on under the expectant treatment till all the glands are invaded and the fever ceasing

* Read before the Washington County Medical society October 8, 1906.

just as a fire in the woods ceases after everything has been consumed to keep it up.

Having discussed the cause, we are now face to face with the prevention which we might dispose of it at one swipe if that would prove efficacious, viz., destroy the germs. This, to be sure, is the main thing to be aimed at, but how are we to do this when they are in the excretions from the kidneys and bowels of the sick and often from those who are well. I am sure if we had no germs we would have no fever and I am equally sure that unless we are very careful to look after our instructions in regard to the discharges, that in many cases our efforts will be in vain. Everything coming from within the patient should be destroyed, either by fire or mixing with lime and thoroughly stirred and then buried. Never allow flies to get to any of the discharges, nor to the vessels which have contained them and always be careful to instruct the patient, friends and attendants carefully along this line in regard to the dangers, telling them that after a fly has satisfied himself around the chamber he will have the ill manners to crawl over your food without ever thinking to wash his feet. For myself I have made it a rule never to eat or drink where there is a case of fever and I so advise all who consult me in regard to the danger of contracting the disease from the sick, explaining to them thoroughly as I can how the danger comes in. By such a course we may educate our patients up to see the importance of using the greatest care in preventing by a strictly scientific way the spread of this disease. Another thing that our patients should be taught in the way of prevention is the part they can perform towards preventing the severity of the disease by always being on the lookout for it and either consulting their doctor or by cleaning out the alimentary canal with salts or calomel on the very first suspicion of fever and if they have a thermometer (as many persons now have) taking their temperature morning and evening, and going to bed and abstaining from solid food till the symptoms have passed away or till the doctor is called. By preventing its severity in the way indicated we may possibly save as many lives as we will by our attempts at preventing it entirely. Another thing which we should teach our patients is that the seemingly pure cold spring or well water may become infected without any visible change so far as appearances go and a source of danger, possibly not so great as the stagnant pool but still a source of danger. Also that even the cleanest office gathered from a pond or

river may contain the germ in active state—that even cistern water gathered from the roofs of houses immediately after a dry spell where the excrements from those infected with this germ had been thrown on top of the ground and become dry and mixed with dust and settled thereon, might become a source of infection. We might also inform our patients that although we know much about the germ of typhoid fever, that we still don't know it all yet, that we may explain the fact that we have more fever in the summer and fall by saying that this is probably the time of the year that the germ flourishes most and then that as there is at this time of the year a smaller amount of water flowing from our springs and in our wells, our chances for getting a given number of germs into our intestinal tracts is so much greater. For instance if a well containing 50 barrels of water in winter contains 50 germs and that these germs multiply and the water diminishes till in the summer there are 50,000 germs and only one barrel of water there would be many thousand times as much danger in getting a given number of germs in the summer as there would be in the winter. We can't always explain how a neighborhood in the country may be free from fever for a number of years and then suddenly have almost an epidemic for one or two years and then no more for several years. Neither can we explain why it was a few years ago that for four or five years the caterpillars increased year after year till it looked like they would destroy our orchards and then suddenly entirely disappeared. There are some things which I at least can't explain, however glad I would be to do so. Possibly the germs may be transported from neighborhood to neighborhood, not only by flies, but by other insects which have become infected from the excrements of typhoid fever patients, these germs not only passing through their alimentary canal unharmed, but actually multiplying therein many times, and when discharged into water or on the ground find their way to springs or wells. To use a rural expression "being still in the ploughed ground" on many of the contributing causes of this disease we are not yet in a position to prevent this disease entirely because of our inability to always know the source from whence comes the invading foe. For instance, last fall when a prolonged dry spell had caused the waters in springs and wells to become low a doctor said to me that there would be a great deal of typhoid fever when it rained. I noticed carefully and the contrary seemed to prevail so far as I was able to observe. This showed

that he did not know all about the causes of this disease though possibly he knew as much as I or any of you about it. Doubtless the seasons and the conditions of the atmosphere have much to do in favoring or retarding the multiplying of the germs outside of the human body and so far as these are concerned we can do nothing but keep our mouths shut and hide our ignorance.

REPORT OF SIX CASES OF PNEUMONIA AND OTHER CASES.*

By O. P. HAMILTON, GAMALIEL.

Case No. 1. Maggie L., age 9, previous health good, on the night of November 6th had a chill. I was called November 7th, early in the forenoon. Pain in lower half of right lung, very restless. T. 104. P. 116, R. 80, tongue heavily coated, bowels constipated, pupils dilated, cough frequent and hard, would get up some mucus and blood, appetite gone. Diagnosis, pneumonia. Treatment: C. C. pills to clear the alimentary canal, Tr. aconite, bryonia and belladonna to reduce temperature, strychnine, digitalis, whiskey and strophanthus for heart stimulants when indicated, terpin hydrate and heroin for cough. The above remedies were used according to the red and white flags that were thrown out, (the danger and peace signals). Discharged November 19th; cured.

Case No. 2. T. C. C., age 70, previous health not good. I treated him two years ago for pneumonia. November 27th, at three o'clock in the morning, had a chill. I saw him about noon the same day. Pain all over front of chest, cough deep and hard, T. 103, P. 120, R. 60, bowels constipated, tongue brown, pupils dilated and nausea. The case went on for three days from bad to worse. Drs. White and Smith were called in consultation, prognosis grave, was delirious for seven or eight days, death seemed almost inevitable. Treatment about the same as No. 1, except for sick stomach I gave cerium oxalate and hydrochlorate of cocaine, hypodermic of morphia and atropia for pain, sulphonal for sleep. Discharged December 18; cured.

Case No. 3. H. M., age 15, previous health good, had a chill November 26th. I was called to see him November 27th at 4 P. M. T. 101, P. 100 R. 40, pain and soreness in lower half of left lung, bowels too active, bladder too active, wet with perspiration, delirious, tongue red, skin soft and cold to the touch, prognosis grave, called Drs. White and Smith in consultation. Treatment same as

No. 1, gave methylene for cystitis, aromatic sulphuric acid for tongue, Tr. gelsemium for mind. Discharged December 12; cured.

Case No. 4. Mrs. M. C., age 54, had not been well for two weeks, found her with pain in upper half of right lung, there seemed to be a general cold on the chest, pain in right side of head almost unbearable, cough hard and deep, lots of blood from head and lungs, temperature normal, P. 90, R. 40, bowels constipated, tongue large and white, appetite gone, very restless. Treatment: Mustard to head and side, hypodermic morphia and atropia for pain and restlessness, C. C. pills to move the bowels. Tr. bryonia for pain in chest, later quinine, heroin for cough, strychnia and Fowler's Sol. for tonic. Discharged December 13; cured.

Case No. 5. J. C. D., age 62, had not taken a dose of medicine in forty years, in splendid health up to present illness. December 6th went to town and spent the day, came home at 5 P. M., ate a hearty supper, went to bed, woke up at ten with a chill, delirium, temperature 105, P. 130, R. 60, tongue clean and moist, could not find out how bowels were, nausea, vomited bile, water and blood, seemed to be suffering from pain in chest, some cough, eyes glassy, bladder not acting. Gave hypodermic morphia and atropia, which soon put him to rest. Next day had pain in both lungs, temperature, pulse and respiration still high, his condition otherwise was better. Treatment about the same as No. 1. Tr. bryonia for tightness in chest. He passed through all the stages of pneumonia. Discharged cured.

Case No. 6. Mrs. E. K. B., age 44, previous health good, mother of four children. She had had a chill three days previous to my first visit, she could not lie down in bed for a pain in her heart. I gave her a close examination and found the following: T. 104, P. 118, R. 80, tongue red, nausea, deep seated pain over upper half of left lung, bowels acting too freely, coughing up some blood. Diagnosis, pleuro-pneumonia. Treatment: Hypodermic morphia and atropia for pain, mustard to stomach, C. C. pills for bowels. Tr. aconite, bryonia and gelsemium for fever, strychnia to brace, heroin for cough. The case is still under treatment.

Mrs. B. H., age 38. Was called to see her November 22nd, could hardly talk or swallow for pain in neck and throat, had had a chill a few days before I saw her, aching of the back and limbs, appetite lost, tonsils large with white patches on them, heavy creamy coat on tongue, breath foul, T. 105, P. 130, R. 25, had not slept any for forty-eight

* Read before the Monroe County Medical Society December 20, 1906.

hours. Diagnosis, suppurative tonsilitis. Treatment: Explored tonsils with hypodermic needle, found pus, opened at once, Ichthyol as a gargle every three hours. Recovered.

Mr. W. H., farmer, age 28. Saw him November 8th. I gave him a rigid examination, found him with intense pain in right side over McBirney's point, very sick and vomiting, bowels had not moved for thirty-six hours, tongue red, delirious, T. 102, P 106, R. 24. The pain seemed to be located about the umbilicus at times, could rest better on his back, the muscles over the appendix seemed to be rigid. Diagnosis, acute catarrhal appendicitis. Treatment: Complete rest in bed, plenty of sweet oil, ice to side, and later on strychnia. Uneventful recovery.

Mr. C, age 35. Found patient as follows: Tossing from one side of bed to the other, sick and vomiting up various articles of food, deep seated pain in lumbar region radiating down thigh, also in testes, frequent micturition, pulse very feeble, spasmodic movement of the muscles. Diagnosis, nephritic colic. Treatment: Hypodermic morphia and atropia and strychnia, hot water to bowels, hips and back. Seemed to be better in thirty minutes; was lots better in sixty minutes. Uneventful recovery.

Fannie C., age 15 months. November 25th on examination found the following: T. 140, P. 140, R. 28, coated tongue, bowels constipated, urine scant, very restless, seemed to be sore all over body, would scream when moved, breath foul, would not or could not nurse. On closer examination of patient I found a large lump of dirt and castor oil on the great toe just back of the nail. The mother had been using the oil on the toe for five days for a small sore. The accumulation of dirt through the day, and the oil at bedtime, soon fixed things. Diagnosis, septic infection. Treatment: Hot water and soap to clean toe, removed lump of dirt and oil, found about thirty drops of pus under it, then used peroxide, permanganate of potash, dressed with boric acid, iodoform gauze and absorbent cotton. cleaned the alimentary canal with calomel and soda. Cured.

REPORT OF A CASE OF IDIOPATHIC UNIVERSAL PRURITUS IN PREGNANCY.

By GEORGE PURDY, NEW LIBERTY.

Mrs. C. G., age 32, neurotic; mother of two children. Family history: maternal grandmother had intense itching during the latter months of one pregnancy other than the patient's mother, later became insane and remained so for several years until death. No

other family history of interest, except that mother has borne three children without unusual incident.

Patient has history of an itchy creepy sensation beginning in the hands and feet in the first pregnancy about the twenty-eighth week which gradually increased to the most terrifying itching imaginable having spread over the entire surface of the body, causing the patient to claw the skin where ulcers in various stages could be found. Patient suffered intensely until full term when she was regularly delivered of a healthy child. (Child is now three and one-half years old and is in excellent condition in every respect). In a very few days after delivery the distressing symptoms disappeared and the patient was entirely free from it until about the thirty-second week in her second pregnancy, when she came under my observation.

According to her statement, she had gone that far without any untoward symptoms whatever. When first seen she described the creepy sensation in the skin on hands and feet and in a very few days it had spread to the other parts of the body and gradually became more terrifying until it was impossible to keep her from denuding the surface by scratching. Owing to the condition the patient was unable to sleep. The digestion and heart action had been imperfect from the time she had come under my observation. The blood revealed nothing of interest. The urinary charges consisted in an unusually high percentage of urea, phosphates and indican excretion. The stool was very offensive and bowel constipated.

Under treatment digestion became better. Kidney, bowel and heart action improved to some extent, but there was never at any time perceptible improvement in the itching, it rather became worse until the thirty-fourth week when, with consultation, the cs was manually dilated and delivery took place. Mother and child did well. Itching ceased very soon and the other conditions returned to normal.

After searching accessible medical literature I have come to the conclusion that this is a rare condition as I am able to find a record of only a very few cases.

Carl Weidner, Louisville, and A. E. Threlkeld, Wheatley, were with me in the case.

THE TREATMENT OF TYPHOID FEVER.

By J. H. LAMPTON, Springfield, Ky.

I do not propose to write an essay on the treatment of typhoid fever to enlighten you, but to try to find out the reason of the great and almost universal prejudice against the

Woodbridge treatment, the beginning, the great source of the present antiseptic treatment as practiced by everybody to-day.

In the early nineties Dr. Woodbridge of Ohio, read papers before different State medical societies, the Mississippi Valley Medical Society, and the American Medical Association, in which he advocated a treatment that is antiseptic, eliminative, and abortive. Since which time you will find in reading on the subject in medical journals, and by noticing the treatment advised by those with whom we come in consultation, the antiseptic and eliminative treatment universally advised. First by giving calomel and then antiseptics.

It all originated, I claim, with Dr. Woodbridge, yet the medical profession, as a rule, ignores the fact that the fever can be aborted. So, also, does it as a rule, refuse to use his treatment as P. D. & Co. and others always have put it up, that is in tablets and capsules. I have heard many objections and excuses for not using the treatment, and the most universal, yet ridiculous one to me is that the medicine is a proprietary one, which is not true, for he gave it to the profession in all the papers he ever read, and while P. D. & Co. only put it up for a while, now Ely Lilly & Co. and Sharp & Dohme put it up and anybody can do so. And suppose it was a proprietary and I ask how many physicians depend on their own formulae in their practice. Up to twenty-five years ago physicians did keep their medicines, and wrote prescriptions for medicines and compounds according to their own notions, but now we have dozens of ready-made compounds for each and every disease.

As to aborting the fever, if the profession will only lay aside prejudice and try the treatment as advised by Woodbridge and carry it out to the smallest detail, it will learn by a short experience that it is true.

I have used it in all cases when I had them to myself and not hampered by some consulting physician, since 1895 and with these results, don't know how many cases in that time, but would guess from one hundred to one hundred and fifty. One death, a result of reinfection, or relapse from some unknown cause.

Duration of fever, from nine to twenty-one days. One case who had hemorrhages had a normal temperature on the ninth day. One case only, that went as long as twenty-one days, who had carried two of her children, "pickaninnies" one at a time through the disease, and without the assistance of anybody except that I placed her medicines on a chair beside her bed, told her how to

take them, and who was five months pregnant, temperature struck normal the twenty-first day, she made a rapid recovery and I delivered her of a living child at term.

The usual time is about fourteen days, you may safely promise the patient that his temperature will strike normal from the thirteenth to the eighteenth day. I did not have much hemorrhage—I believe because of the short duration of the disease. By the elimination of the typhoid bacilli by calomel and podophylin and by the antiseptics the ulcers are quickly healed, therefore no hemorrhage.

Tympanites—Have none, because of the antiseptics and no milk. Delirium not so much because of the early control of fever. Emaciation none, patients recover too soon. My treatment when I am not hampered by other physicians is to use the Woodbridge treatment as directed by him in all his literature, promptly and regardless of age, condition or length of time the case has been in progress, regardless of hemorrhage even where so many back down and out for fear of its making matters worse by increasing peristaltic action of the intestines. Regardless of the fear of weakening the patient by purgation, it matters not how weak he is when I see him for it does not weaken like the fever does, regardless of salivation for if I give the saturated solution of chlorate of potash a day or two, I know I will not have it, regardless of all complications, because I can use any remedy I wish in conjunction with my tablets or capsules, and I seldom have the complications because of the early removal of the cause, and of the undoubted control of the disease.

I even expect to have better results than I have had in the past, for I had been till the last two years giving milk as a part of my diet. But I have quit that, because milk will not begin to digest in the alimentary canal of a typhoid fever patient, but will cause more tympanites and more harm, by its being more indigestible than a piece of rare beef-steak, or any other solid food.

For the diet I use albumen of eggs in lemonade, and beef, chicken or mutton broth. Plenty of the broth on account of the salt the patient gets by the way, a normal salt solution enema sometimes will be stimulating to the patient as well as a permanent benefit. Especially is it beneficial after a hemorrhage.

Of course I look after the heart's action, and usually give one-fortieth or one-thirtieth of a grain of strychnia every three or four hours throughout the treatment.

Some physicians say it is too much of a routine business for them, but if they will, they can use a great deal of judgment, and

show a great deal of skill in the management of a case with the treatment, as well as with any other, for as you know there are never two cases just alike, therefore, you vary your medicines according to the circumstances governing each individual case.

THE TREATMENT OF ABORTION AND SOME OF ITS COMPLICATIONS.*

BY J. T. REDDICK, PADUCAH.

There are certain subjects in medicine which at first sight seem commonplace; that the last word concerning them had long ago been said, and that further discussion would be both unnecessary and without profit. But the ever increasing desire to avoid maternity, legitimate as well as illegitimate, and the increasing number of abortions, criminal and otherwise, make this a subject of perennial interest to the physician.

It is a subject of much interest to the general practitioner, for it is he who is first summoned and it is he upon whom the life and the future welfare of the patient depend; and equally so is it of special interest to the gynecologist and abdominal surgeon for they are called upon to treat much of the invalidism, the result of badly managed abortions.

Under the most favorable circumstances abortion leaves a woman in a pathological condition—nature's laws have been interfered with and the process of involution takes place slowly and often very imperfectly after abortion. Many women become chronic invalids whose ill health is directly attributable to one or more abortions.

Many cases of abortion are simple when skillfully treated, but the complicated cases often cause the physician great anxiety.

The treatment of abortion may be considered under three heads.

- 1st. *Prophylactic in threatened abortion.*
- 2nd. *Preventive in threatened abortion.*
- 3rd. *The treatment of incomplete abortion and its complications.*

In women who habitually abort, the exact cause should be ascertained if possible, and treated accordingly. Syphilis being a frequent cause should be looked for and treated. Uterine displacements, cervical lacerations, anemia, malaria, and other intercurrent diseases cause abortions and must have appropriate treatment. There are cases who present no apparent cause, but habitually abort. In these cases the greatest care should be taken, avoiding all possible sources of irritation such as fatiguing work, long walks, lifting, stair climbing, jumping, tight corsets, poorly

ventilated and overheated rooms, mental excitement, excessive coition, etc.

Treatment in threatened abortion. Finding upon examination, that the os is not dilated, hemorrhage not profuse, and pains not severe, we may feel reasonably sure that the abortion may be prevented, and should be treated accordingly. If we had absolute knowledge that the fetus was dead there would be no reason for making efforts to prevent the abortion, but as there are no certain signs of fetal death at this stage of the pregnancy we must treat it as if the fetus was still alive. Perfect quietude of the patient in a recumbent position in a well ventilated room, must be maintained; due attention to all the excretory organs, a simple diet, and medicines to arrest uterine contractions is the treatment. In the way of drug medication, opium in some of its forms is the remedy, and should be given in full doses often enough to arrest all pains and uterine contraction. I prefer morphia, hypodermically administered.

Treatment in inevitable abortion. In inevitable abortion it is a question as to whether or not the physician should at once interfere and complete the abortion by mechanical means. I believe the attitude of the physician should be one of non-interference until nature proved inefficient in completing the process.

In the early stages of unpreventable abortion, with pains, hemorrhage, and undilated os, the tampon is the remedy that meets the indications. It will arrest hemorrhage and stimulate contractions. The patient should be placed across the bed or on a table, either in the Sims, or dorsal position (according to the wish of the operator), the external genitals and vagina thoroughly cleaned with green soap and douched with an antiseptic solution, and the vagina tightly packed with sterile gauze. This is frequently all that is necessary to terminate the abortion and when the tampon is removed a few hours later, the fetus will be found in the dressing. If, however, everything has not passed the tampon may be repeated, giving the same attention to strict asepsis.

If this treatment proves inefficient in completing the process, it then becomes our duty to complete the abortion without delay. In order to do this the patient is placed in the same position as for the vaginal packing, the same attention given to the sterilization of instruments and dressings and the preparation of the field of operation and the operator's hands as if for intra-abdominal work. The cervix is fixed with tenaculum and dilated sufficiently to admit of intra-uterine exploration with the finger of the operator or some

* Read before the Kentucky State Medical Association October 11, 1907.

form of dull curette. I do not believe the sharp curette has any place in the treatment of these cases, in fact, I regard it as a positively mischievous instrument. The trained finger is perhaps the best instrument for this purpose; by it the cavity of the uterus may be gone over and all retained products loosened and removed. The St. Cyr augur curette has proved to me to be a very harmless and efficient instrument in removing retained secundes.

In last week's issue of the Journal of the American Medical Association, there is reported by Edwin Walker, of Evansville, Ind., in the proceedings of the American Association of Obstetricians and Gynecologists held at Cincinnati last month, a case of rupture of the uterus with prolapse of the intestine. The woman had aborted about the fourth month, and he was called to deliver the placenta. He used the uterine augur, with which he brought away the placenta, and before he realized it he had quite a large mass, which he found to be the intestine. A handful of intestine was presenting at the vulva. Dr. Walker replaced it in the vagina, applied a tight binder, removed the woman to a hospital, opened the abdomen, and found that thirty-one inches, with mesentery, were torn away. He resected the intestine, used a Murphy button, did not employ any sutures in the uterus, as the parts fell together so well, then closed the abdomen, and the patient made a good recovery. He also mentioned a case in which the uterus was punctured during a curettement.

The famous Prof. Dührssen of Berlin and many other physicians of equal prominence have had similar experiences and it certainly behooves us to be very careful in the use of the curette immediately following confinement and in abortions.

After the uterus is emptied then it should be well douched with some antiseptic solution; many authors advise a bichloride solution, I usually use a solution of creolin.

"The normal uterus and vagina (1) will drain very satisfactorily if let alone; hence, unless there is severe hemorrhage, it is better after curettement to leave both the uterus and vagina free from gauze packing. The uterus is free to contract, the serous and other discharges flow away unhampered, and the chances of infection are greatly diminished.

The use of ergot to hasten the abortion by stimulating the contractions is very generally advised, but should be unhesitatingly condemned. The tetanic contractions induced by ergot are not favorable to the satisfactory emptying of the uterine cavity. The tampon accomplishes the same result more efficiently

and certainly, and is safe, while ergot is unreliable and dangerous. The use of ergot should be reserved for cases where hemorrhages threaten after complete evacuation of the uterus, and cases of subinvolution.

The tampon properly applied is an invaluable aid in abortions. It stimulates uterine contractions, dilates the os, and stops hemorrhage both mechanically and dynamically, besides maintaining a condition of surgical cleanliness. The clot which forms on top of the tampon mechanically causes a separation of the ovum in a very natural and satisfactory way. The principal contraindication to the use of the tampon is the presence of sepsis. After the sixth month, also, the uterus is so large that it can contain a large amount of blood, and here the vaginal tampon should only be employed in association with uterine packing.

In cases of abortion where sepsis is already present as shown by elevation of temperature and rapid pulse or by a rapid pulse while the temperature remains near the normal, active interference is definitely and urgently indicated.

This is the condition of affairs most frequently in those cases where the patient has visited some of the numerous abortionists that infest our cities. The uterus should then be thoroughly emptied, douched and then let alone. The time for the douche is before and after curettement, to cleanse the canal and wash out any loose detritus from the uterus and vagina and to provide for the elimination of any germs that may have been introduced; but here its function ends. It is unnecessary, useless and injurious, both in normal labor and abortion as the experiments of Kronig (confirmed by Menge, Doderlein and Williams) have shown.

Every abortion must be regarded as a severe surgical case and treated as such in justice to the patient and attendant. The practitioner should be alert at all times to impress upon his clientage that abortion is a very serious matter and requires the best judgment and skill obtainable in its management, for where one woman passes through these perils successfully, many are seriously affected, either directly or remotely, and no physician can be free from anxiety until the case is terminated.

I will now briefly discuss some of the complications or results of abortion. Subinvolution of the uterus, with its train of symptoms, viz: endometritis, menorrhagia, metrorrhagia and misplacements, are perhaps more frequent after abortion than after labor at full term, because the woman who aborts often desires to conceal the fact

and does not take the proper care of herself. Ergot and the general tonics are indicated in these cases and for that enlarged, congested and prolapsed condition of the uterus a favorite treatment of mine for many years has been the intra-uterine application of iodized-phenol and wool tampons saturated with a mixture of glycerine, sulphate of zinc and boracic acid. The benefits of this treatment are speedy and marked.

The most frequent and dangerous complication attending, or following abortion is septic poisoning. This condition is most apt to follow criminal abortion, for two reasons. The habitual aborter aborts without outside interference, while the woman who visits the professional abortionist, who is often nothing more than a bunglesome butcher, ignorant of the principles of surgical asepsis, comes away with the genital tract wounded and in first class condition to receive pathogenic micro-organisms, which he or she may have already introduced.

In sapremia, we have the symptoms resulting from, to quote Roswell Park "a putrid suppository." This is a toxemia due to the absorption of putrefactive bacteria and is local. It is characterized by fever, profuse, frothy and foul smelling lochia and the uterus is usually filled with decomposing blood clots and products of conception. The uterus should be emptied by the uterine douche, the finger or the dull curette. Preferably the finger should be used, but if the curette is used, the greatest possible care should be exercised not to injure the uterus. After the finger or curette is used, then thoroughly douche with creolin or saline solution the uterine cavity, removing all small clots and debris, and I believe it is good practice to then thoroughly apply iodized-phenol to the uterine cavity. This treatment if well done is usually sufficient to relieve these cases due to saphrophytic infection.

In true sepsis, due to streptococcus infection, little if anything is to be derived from local treatment. It is perhaps advisable to use the douche to see that the genital tract is clean. By no means, use a curette. The treatment is that for a general septicæmia, using every effort to maintain the patient's strength. My experience with the antistreptococcal serum is limited, but quite satisfactory. I have had an opportunity to use it in only a few cases, but have been quite well pleased with it. To get best results it should be used in maximum doses. I have also used the unguentum Crede, but with no apparent benefit. The intra-venous and rectal use of saline solution, is, in my opinion of distinct

value. I will mention only, the removal of the uterus in septicæmia, that it may be discussed by the abdominal surgeon.

Literature (1) Reed, Treatment of Abortion, American Journal of Obstetrics, Vol. 44, No. 2.

EXTRA-UTERINE PREGNANCY, WITH REPORT OF A CASE.*

BY W. T. DAUGHTRY, MARION.

Extra-uterine pregnancy is a condition where the fertilized ovum has become arrested at some point between the ovary and uterus, and more or less complete fetal development takes place in this abnormal site, as in the ovary, tube or abdomen. It is said to occur in about 1 in 500 normal pregnancies.

1. *Etiology*: The causes are somewhat obscure. Concise and definite statements can not be made concerning the etiology of this condition, although quite a number of theories have been advanced, all or many of which seem very plausible.

The first are conditions which interfere with the downward passage of the ovum, such as adhesions, tumors compressing the lumen of the tube, formation of mucous polypi, a diverticulum, an accessory tube, or ostia, atresia of the tube, and very long tortuous tube, or anything which increases the size of the ovum before it reaches the uterus.

Conditions which result from inflammatory diseases of the tubes and ovaries, such as chronic salpingitis, which has destroyed the cilia of the lining membrane, and hypertrophy which interferes with the normal peristaltic motion of the tube. Peritoneal adhesions, causing constrictions and distortions of the tubes, and congenital narrowness of their caliber, may also obstruct the tubal canals. This affection most often takes place after long periods of sterility, but may happen within few months after confinement. The accident may happen to nulliparous, as well as multiparous women, and there is no period in a woman's child-bearing life that is exempt.

Classification: Conception may take place in any part of the tube from the ovary to uterus, and are classified according to the location of the impregnated ovum, as follows: Ampullar, isthmic, and interstitial pregnancy.

Ampullar Pregnancy.—This is the most common form of tubal pregnancy, and the

* Read before the Crittenden County Medical Society—

fertilized ovum is lodged in the ampulla or outer part of the tube.

Isthmic Pregnancy.—This variety is not so common as the ampullary pregnancy. The impregnated ovum may be attached to any part of the tube from the ampulla to the uterus.

Interstitial Pregnancy.—This is the rarest form of tubal pregnancy. The ovum in this form is implanted in that part of the tube which penetrates the uterine wall.

In the course of gestation of tubal pregnancy, the tube becomes hypertrophied, swollen and turgid, and its vascularity is very greatly increased. The abdominal opening becomes closed at about the 8th week. As the ovum develops the tube becomes thin and distended, and its walls weakened.

The pregnancy may end in tubal abortion, rupture of the tube, death of the ovum, and development of the fetus to full term before rupture.

Tubal Abortion: This is the expulsion of the ovum through the fimbriated opening of the tube into the peritoneal cavity. When this accident occurs, it must happen before or by the eighth or ninth week, as the tube closes at about this time. Therefore, the contents cannot be expelled, except by rupture of the walls. Abortion is most likely to occur from the ampulla; but may sometimes happen from the isthmic or true tubular variety; and can never happen from the interstitial, or tubo-uterine cases.

The expulsion of the contents of the tube is accompanied by more or less hemorrhage; sometimes the ovum is partially expelled through the opening in the tube, and causes continued, or interrupted free hemorrhage, and causes the death of the patient in a few hours; in some cases, in a very few minutes.

The fetus in tubal abortion always perish; and, as to the mother, the results vary in different cases. Sometimes the bleeding stops, embryo and blood are absorbed, and recovery takes place; in others, the patient dies from shock and hemorrhage. The hematocoele may become infected and cause a fatal peritonitis. The hematocoele is sometimes walled off by adhesion, and may later become infected, causing a pelvic abscess which may rupture, discharging its contents into intestine, bladder, rectum or vagina.

Rupture of the tube is the most frequent termination, and is caused by distension of the tube from the growing ovum; also from the chorionic villi penetrating the tube wall, and traumatic, such as vaginal examination,

straining at stool, lifting, falls and sexual intercourse.

In rupture the contents may be thrown into the abdominal cavity, between the layers of the broad ligament, or into the cavity of the uterus. Rupture into the abdomen may occur from all the varieties of extra-uterine pregnancy; and, on account of the free space, the peritoneal cavity into which the hemorrhage occurs. Such patients usually succumb in a few hours, unless relieved by operative interference.

The rupture is sometimes sudden, from a large rent in the tube walls, through which the bleeding is profuse; or, on the other hand, the wall may give way gradually, the ovum partially or for a time completely blocking the opening, giving time for the vessels to contract and the coagulation of blood in the open vessel, preventing a fatal hemorrhage, and recovery takes place after the ovum and blood are absorbed, or it may be walled off by adhesion.

The hematocoele sometimes becomes infected, causing peritonitis, or abscess, which may rupture into hollow viscera. The fetus usually dies at the time of first hemorrhage. It may happen in very rare cases that the fetus, after being expelled from the ruptured tube, may continue to develop if there is enough of the placenta left *in situ* to support life, and later becomes attached to the surface of peritoneum.

Rupture of the tube between the folds of the broad ligament may happen from the isthmic, or the ampullary, but very rarely, if ever, occurs from the interstitial variety. The hemorrhage usually is not so profuse, as the blood is emptied into less space and is confined to smaller area, and bleeding is prevented when the space is filled.

The hematoma and the ovum may be absorbed, or may become infected, and cause pelvic abscess. The fetus, as a rule, dies when rupture occurs, but may continue to more or less complete development. A secondary rupture may occur through the fold of the broad ligament, the fetus escape into the peritoneal cavity, and development may continue after this accident, if the hemorrhage is slight and the placental attachment is not too much disturbed.

It is possible that the interstitial variety may rupture into the uterus, and, if the placental attachment is not destroyed, go on to complete development, and be delivered through the natural channel. This rupture may occur at any time. Isthmic and ampulla gestation usually between the fourth and twelfth week. In the interstitial variety, from the fourth to twentieth week, usually

about the third or fourth month. If the ovum dies in the embryonic stage of development, from hemorrhage into its membranes, before the tube ruptures, it becomes an organized mass and is known as a tubal mole. If it does not become infected, it may be retained in the tube for months, or even years, without causing any symptoms, except the presence of the mass or tumor in the pelvis, or pressure symptoms. In very rare cases the fetus may develop to full term without the tube, and die at the expiration of this period. Early death of the ovum, with rupture of the tube, the embryo, membrane and fluids, as stated before, may be absorbed; but later in the pregnancy, there are more peculiar and interesting changes which take place. The fetus may become calcified and form a lithopedion, or changed into adipocere; it may become mummified, or the soft structures absorbed, leaving only the skeleton. After the fetus undergoes some of these changes, it becomes encapsulated, and remains quiescent in this condition for years. If the fetus develops to full term, it is ill-developed, undersized, and often deformed, caused mainly from the lack of proper nourishment; and usually dies at the time of removal; and, if it survives the operation, death occurs in a short time, except in very rare cases.

Symptoms: In most cases the early symptoms are of normal pregnancy,—the patient thinks herself pregnant. The patient complains of morning sickness and a sensation of fullness in the breast. Menstruation ceases; but in some cases it may not be interrupted, or may not stop for two or three months, or the flow lessened in amount, and duration shortened. On examination, we find the breast enlarged, veins fuller than common. The areola darkened and swollen, and colostrum in the breast after about the third month. The cervix softened, the os is patulous and uterus enlarged. The decidua is often thrown off in small pieces or shreds, or as a complete cast of uterine cavity. The patient often has colicky pains in the hypogastrium and in the inguinal regions at irregular intervals. Bimanual examination reveals tumor on one side of the uterus; it has a soft boggy feel, and is usually tender, and painful upon pressure.

At the time of rupture or abortion, the symptoms are of severe pain in the lower part of abdomen, followed by collapse. The pain is acute, agonizing, and excruciating, with signs of shock and collapse. Pulse becomes very weak and rapid, or absent; temperature sub-normal: respiration sighing; skin pale, and deathly pallor; eyes glassy, and

pupils dilated; extremities cold; there is more or less clammy perspiration; face has an anxious expression; the patient, when conscious, complains of peculiar sounds in the ears, and impaired vision. Vaginal examination reveals a fullness in Douglas' cul-de-sac which fluctuates, and there seems to be fluid in the abdominal cavity. Later on, the blood coagulates, and there seems to be a more or less distinct tumor of a doughy, boggy feel.

Mrs. C. (col.) age 33, mother of one child 14 years of age. No miscarriage; menstruation regular before this conception, which occurred about January 15th. Menstruation ceased for the next two periods; reappeared at about the next three regular periods, of scanty and light colored flow, followed in short time by excruciating pain in right half of lower abdomen, accompanied by faint, weak, nervous sensation which subsided after twenty-four hours in bed. This attack was thought to have been caused by the patient doing her family washing. Second attack came on after the patient had retired for the night. I was called at midnight; and, after getting a history of the case, mistook the trouble for a threatened miscarriage; gave hypodermic of morphine, and retired in a short time after the patient had gotten relief, without a careful examination. After two or three days in bed, the patient seemed to do fairly well, until about time for her next regular menstrual period. Next, and third attack seemed still more severe, and patient fainted. When I arrived, she had rallied, complaining of pains of an intermitting character, stimulating labor pains. Patient relieved by another hypodermic of morphine, after which I made examination, finding large tumor on right side of, and pressing uterus to left. At this examination I thought the growth was either fibroid, cystic degeneration of the ovary, or a tubal pregnancy. As before, the patient did very well after two or three days in bed. Three or four weeks later I was called at one o'clock at night; found the patient suffering from shock, and in a collapsed condition, with all the symptoms of hemorrhage, which, seemingly, was controlled by morphine, ergot and adrenalin solution. Patient rallied somewhat in a short time. On digital examination, I found Douglas' cul-de-sac filled with fluid. It was now plain that we were dealing with extra-uterine pregnancy and ruptured tube. I advised an operation, and left to get help, and make preparation. In a short time her husband came to the office with a complete cast of uterine decidua, which was expelled after I left the patient. The operation was refused. Peritonitis developed in about 24 hours, and

subsided in about ten days. Convalescence slow, afterwards the patient was able to walk about the house. This accumulation ruptured into the rectum from Douglas' cul-de-sac, after slight exertion, and most of the fetus and very offensive blood clots were discharged by the rectum. There was slight discharge for sixteen or eighteen days; at this time there was one of the skull bones discharged, after which the discharge ceased. At present, the patient's health is about as good as usual, except irregular menstruation, dysmenorrhea and some difficulty experienced in defecation, if the rectum is allowed to become loaded. The uterus is slightly retro-flexed, firmly bound down on the perineum by adhesions. There is a mass of what seems to be cicatricial tissue binding the uterus to floor of the pelvis, which lays posteriorly, and to the right of uterus, rendering it immovable.

The treatment of extra-uterine gestation is operative under all conditions. To take up the operation at the different stages and condition of the patient, as before primary rupture or abortion at the time of rupture or abortion, after the rupture or abortion, and during the latter part of gestation, and follow out each division, give the technique of the operation, would probably take more time than allowed for this paper. Therefore, I shall not discuss the treatment further.

DIPHTHERIA—DIAGNOSIS.*

BY W. E. SLEET, MIDWAY.

At the onset of this paper, I wish to state that I do not deny the diagnosis of the disease as made by our pathologists or clinicians. It is a generally accepted fact that the disease is due to the Klebs-Loeffler bacillus. Therefore I do not wish to speak of diagnosis made by our pathologists, but purely from the infection, caused by diphtheria, vs. membranous laryngitis.

Holt states that (1) membranous laryngitis, beginning in the larynx is almost invariably true diphtheria, it is due to the Klebs-Loeffler bacillus. (2) membranous inflammation of the tonsils, pharynx, of the nose is, in a great majority of cases, due to the Loeffler bacillus. You will notice that he states, "beginning" in the larynx, which would indicate that the disease might or would extend to the pharynx and tonsils, etc. In the cases which I will report later, the

disease began in the larynx and did not extend to the other tissues.

As is well known diphtheria is a disease of antiquity, dating back, possibly as far as the Christian era. The old writers having recognized and described it clinically almost as well as the writers of to-day, in so far as the symptoms and contagion are concerned, but of course not as to prognosis and treatment. They also recognized and described membranous croup, pseudo-membranous croup and acute catarrhal laryngitis. Possibly it is only since 1890, or later that membranous laryngitis, has been recognized as laryngeal diphtheria, or true diphtheria. The older writers seem not to have realized the importance of the contagion of membranous croup, as compared to that of the membranous laryngitis of to-day. Recognizing fully the importance of the contagion of true pharyngeal diphtheria, and not doubting the presence of the Klebs-Loeffler bacillus being present in membranous laryngitis, I have always been doubtful, and to a certain extent, as to the infection produced from cases of membranous laryngitis, where none of the adjacent tissues to the trachea are involved, when the pharynx and tissues have become involved there can be no doubt as to the importance of the infection produced. The physician from a clinical standpoint usually has but little difficulty in the diagnosis of the pharyngeal diphtheria, but will be more easily and frequently deceived in mild cases, than in the more severe ones, unless a microscopical examination be made. Possibly many of us have frequently been called to attend a small child from 1 to 5 years of age, suffering as the parents say from "croup," upon examination, Temp. 101 to 102, pulse good, but fast, bowels usually constipated, tongue slightly coated, throat clean, except possibly some enlargement of the tonsils, no dyspnoea, no pinched features, seemingly in no distress, except coarse heavy, sometimes brassy cough. No secretion from throat or mouth, excepting a small quantity of slightly viscid mucus. Diagnosis, acute catarrhal laryngitis, with spasm or commonly known as pseudo-membranous croup. Given the usual medicinal treatment, the child usually recovers within 48 to 96 hours. In other cases, with symptoms to all appearances the same, the termination is quite different, without any warning or progression of the symptoms as described above, the child suddenly becomes cyanotic, dyspnoea, very pronounced, anxious expression, throat clean, tonsils enlarged and possibly some congestion. In this condition death recurring before we fully realize the situation, and intubation or

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tracheotomy can be performed, especially is this so as relates to patients living some distance in the country. I desire to report the following cases occurring in my practice during the past 3 years:

(1) Male child, age about 18 months, only slight fever, pulse normal, lungs, small moist rales, cough very harsh and brassy, throat clean, tonsils somewhat enlarged. Diagnosis, acute catarrhal laryngitis, with spasms, commonly known as pseudo-membranous croup, usual remedies prescribed, on the following morning, the child had a very restless night, dyspnoea very pronounced, expression anxious. J. W. Crenshaw of Versailles called in consultation at 2 P. M. Diagnosis, then made of membranous laryngitis, antitoxin was given, internal medication continued, on the following morning the child was much improved and recovered. At the time the antitoxin was given this child was almost in a moribund condition. Case (2), Lee A. C. male, age 21 months, history of whooping cough for past two weeks, slight fever, pulse normal, some mucous rales in lungs, heavy hoarse cough, throat clean, tonsils somewhat enlarged. Diagnosis, catarrhal laryngitis with spasm, usual remedies prescribed. Did not return to see the child until 48 hours after first visit. Temp. about 102, pulse fast, but good, some dyspnoea, breathing rough, cough very hoarse and brassy, was called again during the night and W. E. Risque, of Midway, was called in consultation, antitoxin was given immediately, child dying in eleven hours after its administration. This family consisted of 14 children ranging in age from 3 to 21 years, no immunizing doses of antitoxin were given. No infection. Case (3). M. W., female, age 3 years, history of whooping cough for past 2 or 3 weeks, only slight fever, pulse normal, soft mucous rales in lungs, heavy hoarse cough, throat clean, diagnosis, catarrhal laryngitis with spasm, second day symptoms unchanged, third day no change in symptoms, progression not marked, fourth day, symptoms more pronounced. W. E. Risque of Midway was called in consultation, antitoxin administered. Intubation was considered, but decided to wait for further development. For several hours thereafter the child's breathing was much easier, but at 8 P. M. suddenly became cyanotic and died in a short time. Case (5) child of Mr. D., male, age 18 months, history of cold and cough for past 2 or 3 days and had croup during previous night. Temp. 101, pulse normal, heavy mucous rales in lungs, throat clean, tonsils somewhat enlarged, hoarse brassy cough. After an emetic, the breathing was much easier, and the child

soon became asleep. Diagnosis, acute catarrhal laryngitis, with spasm. I returned at 7 P. M., cough very harsh and brassy, dyspnoea, cyanosis, anxious expression, pulse very fast and weak. Diagnosis then made of membranous laryngitis. W. B. McClure of Lexington was immediately called in consultation, arriving about 9 P. M., tracheotomy was performed, but death occurred during the operation. Case (6) J. M. F., male, age 4 1-2 years, history of having awakened about 4 A. M. with hoarse croupy cough. Temp. 101, pulse 120 good, lungs clear, throat clean. Diagnosis, acute catarrhal laryngitis with spasm, usual remedies prescribed. Next morning symptoms unchanged, patient had been in dining-room and ate breakfast, and upon my arrival met me at the door, played in room during the day and was on the front porch during the afternoon to meet some friends. The third day 9 A. M. symptoms unchanged, 3:30 P. M. symptoms unchanged. Temp. 99 1-5, pulse good, had just taken an emetic before my arrival and was expectorating some slightly viscid mucus, patient upon my leaving was lying in bed playing with small rubber ball, prognosis good. I was unavoidably detained from that time until 1:30 A. M. of the following day; upon my return home I was more than surprised to hear that the child had died about one hour previously. During my absence about 9 P. M. the child suddenly became worse, and another physician was called and in a short time, he called another physician in consultation, but notwithstanding their combined efforts, the child died, evidently from membranous laryngitis. One physician stated that after the child had died that he examined the throat and a small patch covered with an exudation could be seen on the left tonsil. There were three other children in this family ranging in age from 2 to 9 years. The two younger children were given immunizing doses of antitoxin, the older child, female, age 9, was so very nervous and excited that it was thought best not to force her to submit to the injection. On Dec. 7th, four days after the death of the other child, I was called to attend this child, whom I had not given antitoxin. Temp. 102, pulse 112, slight cough, upon examination found both tonsils enlarged and swollen, on the right tonsil was a small patch covered with a white glistening exudation which was easily removed by swab, leaving a clean surface with no bleeding. I immediately gave her 1000 units of antitoxin, being all that I had with me at the time, also internal treatment and antiseptic gargle, she recovered fully within 72 hours. There were several other children

exposed during the sickness, of case (6), but there was no infection. I had S. B. Marks, a pathologist of Lexington, make a microscopical examination of a smear from swab of tonsil from this girl's throat. Report, Klebs-Loeffler Bacilli, few typical of K.-L. bacilli, many suggestive of K.-L. B. infection, but more closely simulating the pseudo-diphtheria bacillus. Pneumococci, — many found. Staphylococci — moderate number. Holt says "in the present chapter (on membranous laryngitis) there will be considered only the clinical aspect of the cases, especially of those in which the disease begins in the larynx for even if the cause is in most cases diphtheria, the clinical picture is laryngitis. In cases of primary laryngeal diphtheria, there are wanting most of the characteristic clinical features, which distinguish diphtheria of the pharynx. There are two reasons for this, one is the relatively rapid course of the disease, often producing death from local causes before the constitutional symptoms resulting from the absorption of the toxin, have developed. The second reason is that absorption of the poison by the laryngeal mucous membrane is very slow and feeble as compared with that which takes place in the pharynx." If the absorption by the larynx is so very slow and feeble, why proclaim these cases to the public as "diphtheria?" Why not say "membranous laryngitis" with a possibility, but hardly a probability of producing any infection? Every precaution, however, should be taken in the cases should any infection arise. When we diagnose a case of diphtheria, the neighbors and public become more or less excited and do not know that there is any difference, as to the extent of the infection, as produced by laryngeal diphtheria or pharyngeal diphtheria.

SURGICAL TREATMENT OF THE URINARY BLADDER, AND OF THE URETHRA.

By ARCH DIXON, M. D., HENDERSON.

Perhaps in the whole domain of surgery, greater advances have been made during the past two decades than have ever before marked its history, and in no branch of the art, with the exception of abdominal surgery, have greater improvements been introduced than in the surgical treatment of the urinary bladder and of the urethra. In 1878, lithotomy was brought to the notice of the profession by Dr. Biglow, of Boston, since which time the crushing operation has been applied to almost every condition under which stone in the bladder is met with in males, females

or children. Supra-pubic cystotomy, which was first done by Pierre Franc, a surgeon of Provence, in 1556, has been revived, and is now not only a recognized surgical procedure, but one which the surgeon in many cases is imperatively called upon to perform. In fact, it may be said that *sectio alta* may be called for in dealing with almost any conditions which may demand cystotomy. It is an admitted fact that lithotomy, with evacuation at one sitting, is the best operation for stone in the bladder; but, under certain conditions, this operation is inadmissible. The stone may be so hard as to preclude the possibility of crushing it by any instrument as yet devised, or it may be so large that the removal of it by any instrument introduced by the urethra is out of the question; or in the case of young children, it may be dangerous or altogether impossible to pass a lithotrite sufficiently strong to accomplish the desired end. In such cases a cutting operation is the only alternative, and one must choose between perineal lithotomy and epicystotomy. It has been often said that we want no better operation for the removal of stone in children than lateral lithotomy.

It is true that the mortality from the operation *per se* is almost *nil*, but can it be said that there are not evil consequences following this operation which may render the life of the patient one of long suffering? (1) Reginald Harrison says, "that a child who has been cut for stone is not safe from stricture of the urethra as he grows up." (2) Greig Smith, in his second edition of *Abdominal Surgery*, re-echoes this statement, and further says: "In the face of actual facts, the position of ignorance as to bad subsequent results after perineal lithotomy can not be upheld. In this (Bristol) district, where stone is rare I have seen in the last nine years five operations for perineal fistula following perineal lithotomy." I, myself, have been concerned in the treatment of several cases of stricture and one of fistula from the same cause, the case of fistula followed a lateral lithotomy made by Dr. Briggs, of Nashville. An operation for the closure of the fistula was only partially successful, and the patient died of surgical kidney. Stricture from this cause may be said to last during life. Sexual incompetency may also be considered as one of the effects; and if this were proved to be an occasional or unavoidable consequence, the reasons for crushing in boys would be materially strengthened. Recent testimony seems to show that, in lithotomy in male children, we have an operation at least as good as lateral lithotomy, and as

regards remote results, incomparably better. Perhaps the most serious objection to the crushing operation is the frequent recurrence of the stone, according to Sir Henry Thompson and Reginald Harrison, the ratio being about one in seven. In cases of females with stones in the bladder, lithotripsy is undoubtedly the safest and best procedure. Except in cases of very large stones, and these are rarely too large to be crushed, or in stones too hard to crush, the question of supra-pubic cystotomy does not come in, and then incision of the urethra with dilatation of the neck of the bladder, followed by immediate suturing of the divided urethra, is perhaps a better and safer operation. The vesico-vaginal incision has nothing to recommend it.

It is not within the province of this paper to discuss at length the relative merits and demerits of the high and the low operations. There are places for both in surgery which they can fill with advantage and without fear of clashing. It cannot be denied that, for removal of stones in cases of distorted or contracted pelvis, of encysted stones; the removal of foreign bodies more or less coated with phosphates, when it is necessary to see as well as feel; the removal of some forms of prostatic enlargement, of tumors and growths connected with the interior of the bladder, supra-pubic cystotomy offers advantages far superior to those we find in perineal lithotomy. My own experience in the high operation has been confined to six or eight cases, the first of which I had the honor to report to the Kentucky State Society in Paducah, in 1887, in which a man had fallen astride a chair and produced complete laceration of the urethra in the bulbomembranous portion. Retention was relieved by supra-pubic puncture, it being impossible to pass a catheter. External perineal urethrotomy was done; but after a careful and prolonged, though unsuccessful search for the posterior end of the divided urethra, supra-pubic cystotomy was performed, and a sound passed through the urethrovessical orifice to the posterior end of the laceration. In this case no difficulty was found in exploring with the finger the entire inner surface of the bladder, and had there been a stone, foreign body or neoplasm, its removal would have been a matter of comparatively small difficulty. The same procedure applies to impermiable stricture of any character and was resorted to by N. Tillaux, of Paris, France, in the case of an impenetrable traumatic stricture. (3). "A man fell straddle of some hard substance, from which there resulted extravasation of urine, fistula, and stricture. External urethrotomy failing to

disclose the posterior opening of the urethral canal, supra-pubic cystotomy was resorted to, after which a finger introduced into the bladder directed a metallic sound into the urethra. This was then made to project into the perineum, and acted as a guide for the operation of external urethrotomy." The difficulty of making external perineal urethrotomy without a guide can only be appreciated by those who have attempted it. It is admittedly one of the most difficult and formidable operations in surgery. In all such cases, where it is impossible to find the posterior opening, I should unhesitatingly resort to supra-pubic cystotomy with retrograde catheterization.

In the treatment of cystitis, of whatever origin, after irrigation combined with internal medication has failed to give relief, either median perineal incision, with free and continued drainage of the bladder by means of rubber tubes, as recommended by Sir Henry Thompson, and used with such success by Harrison or by retention catheter offers almost the only cure. Mr. Harrison in speaking of such cases, says: "(4) I could not help feeling that the bladder under these circumstances was not unlike in many respects a chronic abscess, and that it was just as necessary to open and drain the one as the other." He cites among other cases that of a man sixty years of age, upon whom perineal section was made. A large drainage tube was put into the bladder and it was drained and washed for eight weeks until he voided normal acid urine, when the tube was removed and the wound allowed to heal, which it did in the course of a month. The patient was perfectly well three years afterward. So far as the method of operating is concerned, the object is to make such an incision as will permit the bladder to be readily and efficiently drained, and I think this may be accomplished either by supra-pubic or median incision. The latter practically is best. I beg leave to cite the following cases:

R. G. A., lawyer, aged twenty-seven years, applied to me in the spring of 1886, for treatment of specific cystitis. The case was systematically treated by irrigation, the bladder being washed out daily, all of the different solutions were used, including bichloride, 1—15,000. Skim-milk diet was insisted upon and enforced. There was slight improvement, and in July the patient was sent to Sebree City, with instructions to drink of the water. Mr. A., remained at Sebree until late in the fall, having experienced some relief. After his return home, I informed him that the only thing which promised a cure in his case was perineal cystotomy with free drain-

age. This was declined, and I saw the case no more until March 2, 1888. In the meantime Mr. A. had consulted numerous physicians, among others Duncan Eve and W. T. Briggs, of Nashville. He was placed in the city hospital by Dr. Eve, who passed a No. 20 sound into the bladder every other day, and followed it with washing the bladder out with solution of nitrate of silver. This treatment was continued for ten days, when the patient left the hospital and placed himself under the treatment of Dr. Briggs, which consisted of irrigation of the bladder with borate of soda, nitric acid, etc., and the internal administration of tonics. This treatment was continued for three or four months at the Hospital of the Good Shepherd. Mr. A. returned home and again consulted me. On March 12th, the median operation was made, and a large, rubber tube introduced into the bladder. Daily irrigation of the bladder with sol. boric acid, half an ounce to a pint of tepid water was kept up for five weeks, the urine having attained its normal acidity in about four weeks. Improvement was marked from the first, and at the end of six weeks, at which time the tube was removed, there had been a gain of 15 pounds in month after removal of the tube, and the patient made a good recovery.

A second case was that of Charles W., aged fifty-six, who was the victim of chronic purulent cystitis, the consequence of impermeable stricture with scrotal fistula. The stricture was hard and callous, situated in the deep urethra. Urine had not passed *per via naturalem* for several months, but dribbled constantly through the fistulous openings in the scrotum, emitting a strong ammoniacal smell, and containing a quantity of pus and mucous. Numerous attempts were made under ether to pass the stricture, but it was found impossible to do so with the smallest filiform bougie. February 6, 1888, the patient was etherized and supra-pubic cystotomy was done. Guided by the index finger of the left hand a sound was passed through the vesico-urethral orifice down to the posterior end of the stricture, with the end of the sound as a guide, external urethrotomy was performed. The posterior end of the urethra was found without difficulty, and a director passed into the bladder. The urethra was further incised and the index finger, guided by the director, was passed into the bladder, the opening being made sufficiently large to readily admit a good-sized rubber drainage tube. The bladder was daily irrigated through the tube with boric solution. The first few days showed marked improvement in the condition of the patient. The

fifth day after the operation a filiform bougie was put through the stricture; by the side of this three others were carried through. The last three being withdrawn, a tunneled sound No. 4 was passed down over the filiform bougie with but little difficulty. This was followed by larger instruments, until a No. 12 was passed. Two days after it was possible to pass a No. 14 sound, and in less than a week the urethra admitted a No. 20. During the fourth week urine passed along the natural passage, being expelled by a spasmodic contraction of the bladder. This is considered by Mr. Harrison as an unfailing indication that the power of the bladder is restored, and it is so proved in this case. At the end of six weeks the tube was withdrawn, and in less than a month afterward the perineal wound was healed.

The fistula was treated by nitrate of silver fused upon a probe, and by pure carbolic acid. The patient made a good recovery. He had complete control over the bladder and passed water in a good stream. The systematic use of a No. 20 sound was enjoined upon him. Reginald Harrison was the first to call attention to the frequency of fever arising from lesions involving the urinary tract, and has reported several fatal cases following so simple an operation as internal urethrotomy. Mr. Harrison calls this "urine fever," and states that the presence of urine in a wound, under certain circumstances was capable of generating an aguish form of pyrexia, often followed by suppression and death. He says (5) "From my observation in connection with the surgery of these parts, it seems probable that the development of urine fever is really due to the absorption of some such poisonous compound as an alkaloid, which is derived from urine, or tissue wound, or decomposition, or from all combined; and I would base this conclusion not from any chemical discovery that, as far as I know, has been hitherto made, but from the following deductions, which seem warrantable:

- (1) That the presence of urine in relation with a recent wound is necessary for the production of what I have spoken of as urine fever.
- (2) That the mere contact of urine with a wound is not sufficient for its production.
- (3) That the retention of fresh urine, within the area of a recent wound, is almost invariably followed by its development in a greater or less degree.
- (4) That where urine is placed under such circumstances as have last been mentioned, the liability to the development of urine fever is greatly diminished when it is sterilized by local or general means.
- (5) That the retention of fresh urine, blood, and the debris of damaged tis-

sue, in the confines of a recent wound for a certain time, at a temperature of somewhere about 100 F., could hardly be possible without chemical changes taking place in the constituents referred to. (6) That there is a common origin for urine fevers rendered probably by the uniformity of the symptoms attending it, which, though differing in degree, are identical, whether following a surgical operation or an accidental wound.

Mr. Harrison makes a strong plea for drainage of the bladder by means of median cystotomy, as follows: "In a considerable number of sub-pubic urethral stricture, unfitted for treatment by dilation, I adopted the following procedure. Internal urethrotomy having been performed, and all obstruction being removed so that a full-sized grooved staff could be passed into the bladder, the patient was placed in a lithotomy position, and a median cystotomy was performed, quite independent of the previous internal operation, so as to admit a full-sized drainage tube, such as I usually employ for this purpose, to be passed into the bladder. By this combination of internal and external urethrotomy, urethral strictures of the worst type were treated, with results which time has already shown to have been eminently satisfactory, both as far as the immediate comfort of the patient was concerned and the permanency of the relief afforded. After a number of trials of this kind, I soon found that as was my drainage so was my freedom from fever; urine fever only occurred when the former was imperfect. When urine, even in very small quantities, was pent up in a recent wound, fever resembling ague invariably followed. When, on the other hand, urine was allowed to escape freely and continuously, as after a lateral lithotomy, no such symptoms developed." The consensus of opinion of to-day is that, urine or urethral fever is of infectious origin. White says (7) "urethral fever called also urinary fever and catheter fever, is the most serious sequel of mechanical interference with the urethra, and is due to absorption of bacteria or their poisonous products through a hyperaemic or abraded mucous surface." Cooper says in speaking of the hypersensibility of the urethra which manifests itself by derangement of the nervous system: (8) "There are patients who experience disturbances in various organs after every catheterization, no matter how carefully it may be performed. Apart from the intolerable pain caused by the passage of the instrument there remains for a considerable time an irritability of the urethra which incapacitates the patient for work, deprives him of appetite and robs him of sleep. Slight

attack of syncope and symptoms of shock occur. Urethral fever must not be confounded with this shock-like condition. It occurs in these forms: first as a single transitory attack of fever; second as a recurrent fever; third as a chronic continuous fever. Cases of this kind occurring after the passage of instruments are at present regarded exclusively as infectious; they indicate the presence of renal complications, but may occur independently thereof." Lydston says (9) "Much of our recent knowledge of the subject is due to bacteriological studies which prove conclusively that many of the cases hitherto described as classical urethral fever are due to germ infection or the absorption of germ products, and should be so designated." Be this as it may, there seems to be no question of the fact that in many cases the mere contact of urine with a solution of continuity in the urethra is sufficient to produce urine fever. Thus, for instance, in a case, in which Holt's method of rapid divulsion was practiced. Contrary to the usual experience of this operation, the patient had a severe rigor three hours afterward, and a temperature of 105°. On the following day this was repeated with, in addition, almost complete suppression of urine. As it appeared that the patient would die if he absorbed any more toxic material from the wound, he was placed in the lithotomy position, a grooved staff was passed, median cystotomy performed, and a drainage tube put into the bladder. After this was done there was neither rigor nor fever, and urine was rapidly secreted. There was nothing to indicate that suppuration had occurred, the time was too short for its development, the symptoms being clearly due to urine poisoning. By thus suddenly altering the relation of the wound with the urine, the whole complexion of the case was immediately changed for the better, and the patient made a rapid recovery.

Joseph Rilus Eastman makes a strong plea for permanent catheterism after operations upon the posterior urethra. He says, (10) "There are many many good reasons for the selection of permanent catheterism for drainage of the bladder after operations upon the posterior urethra, among which are the following: (1) By its use the urine is removed by the natural channel. (2) If used after operations opening the posterior urethra until the perineal defect is closed, the period of convalescence is shortened, since the perineal wound closes more promptly if the urine be drained through the urethra. (3) The caliber of the urethra is maintained or even increased, and the subsequent passage of in-

struments is rendered easy. (4) Much of the tedious work of after treatment as sounding becomes unnecessary, or is decidedly lessened. (5) After perineal section involving removal of a portion of the posterior urethra, intermittent catheterism or sounding is often harmful and difficult of execution; hence maintenance of the urethral lumen becomes a serious task. If, however, the retained catheter is used, sounding becomes unnecessary, and the new segment of urethra has a guide over which to form itself. (6) The urine may be drained thus accurately into a receptacle, and bed sores, dermatitis, and much discomforts are avoided. (7) The danger of uraemic poisoning is reduced, since the area of the unprotected tissue with which the urine must come in contact is diminished, for the same reason the danger of bacterial infections are lessened. (8) Pain and fever are slight during permanent catheterism, if care be exercised that the instrument does not project too far into the bladder. (9) Soft and hard infiltrations which may narrow the caliber of the urethra are removed by the pressure absorption produced by the presence of the catheter."

Some degree of mechanical urethritis will perhaps always be produced by continuous catheterism, but if rubber catheters be used, the urethritis thus occasioned will be insignificant. Inflexible instruments, if long retained, almost invariably cause trouble. During permanent catheterism with a metallic instrument, abscess is very likely to develop in the periurethral spaces at the scrotal angle, at the bulbo-membranous junction, in the bladder, or wherever its point or shoulder rests, likewise every change in the position of the patient may cause injury to the prostate or bladder."

It is generally admitted that a specific urethritis or gonorrhea is the common cause of the formation of stricture. "The acute form of this disorder, unless great care is taken, is very apt to become merged into the condition ordinarily known as chronic granular urethritis. By the latter term we are to understand that at one or more spots within the urethra the epithelium has become so damaged, as a consequence of the burrowing of gonococci and of the prolonged inflammation, that it ceases to render the canal urine-tight, and a slow process of escape of some of the constituents of the urine into the tissues comprising the urethra and surrounding it takes place. As a consequence of this, and to prevent further urine soakage into the tissues, inflammatory exudation is excited, and barriers of lymph, which ultimately become organized, are thrown out op-

posite the places where the leakage takes place. Thus splints of plastic tissue are formed, corresponding with the spot or spots where the epithelium has been so damaged by persisting inflammation as to cease to discharge its normal function. In this strengthening of the urethra we recognize, in the first instance, a conservative action, eventually, however, as in other compensating processes, certain inconveniences follow which constitute, as it were, an independent disease. There are many considerations which seem to indicate that an excessive form of plastic exudation in the tissues around the urethra is probably excited by interstitial leakage, or exosmosis of some of the constituents of urine through the walls of the canal. Although the mucous membrane is the tissue chiefly involved in the primary inflammation, it is, as a rule, only secondarily implicated in the stricture-forming process. In many instances the dimensions of the mucous membrane are not permanently altered, and it will be found possible to split a stricture without necessarily damaging the lining membrane of the canal. The plastic exudation which makes up a stricture differs from other exudations provoked in other parts of the body by inflammation in the degree of its density and tendency to contract. This is specially true in regard to the cicatrix which is formed in connection with ruptures and lacerations of the urethra, and unmistakably show the effect produced in the healing process of a recent wound which is constantly submitted to the action of more or less pent-up urine.

This, then, being the modern pathology of the formation of strictures, and of the production of urine fever, the practical lessons to be learned from it are these: Careful disinfection of the surgeon's hands and instruments and irrigation of the urethral canal with an antiseptic solution should precede every step or operation that may lead to wounding of the urethral mucous membrane. The condition of the urine should be influenced by the internal administration of boric acid, benzoic acid, salol, etc., so as to render it neutral. This should be done in all cases, and more especially is this treatment demanded if the urine be ammoniacal. In cases of very tight deep strictures, it is perhaps better to make external urethrotomy, and to introduce a full sized drainage-tube into the bladder by means of median cystotomy. If the posterior end cannot be found, supra-pubic cystotomy should be done, and a sound passed through the urethro-vesical orifice. In cases of traumatic laceration of the deep urethra, if it be true that the formation

of the dense cicatricial material which constitutes a stricture is the result of the constant contact of urine with an internal wound, then it is evident that free urine drainage is the most important feature in the treatment, and this can be brought about by perineal or suprapubic cystotomy and the introduction of a drainage tube into the bladder, or by permanent catheterism. Strictures caused by traumatic rupture of the deep urethra are the most intractable of all.

I deem it unnecessary to tax your patience by giving the mechanism of rupture of the urethra, which has long engaged the attention of authors, who have expressed in regard to this subject contradictory opinions. The theory advanced by Velpeau and Franc was long accepted without contest. In 1876 Cras announced his theory, and still later that of Poncet, of Lyons, and Ollier was given to the world. Last of all, Terrillon has arrived at conclusions at least satisfactory to himself, but as yet the matter remains *sub-judice*. The recognition of the location and extent of a rupture is perhaps more important as regards treatment than is that of its mechanism. It makes a vast difference, both in regard to the introduction of a catheter and to the search for the posterior end of the torn urethra, whether the rupture be complete or incomplete. In the membranous portion according to Terrillon, the rupture is most frequently total, on account of the thinness of the walls and the feeble resistance of the surrounding muscles. It is only in exceptional cases that the mucous membrane is simply frayed or split. Where there is total rupture the search for the posterior segment is especially difficult, for the canal is divided transversely. The two ends, one posterior and the other anterior, are retracted and separated by a distance more or less great, and sometimes, Duplay says, they are even placed laterally in regard to one another.

In such cases the difficulty to be met with in the introduction of a catheter or in the search for the posterior end can be readily appreciated.

In conclusion, I would urge the necessity of early operative procedure in almost every case of traumatic rupture of the urethra, not excepting even those cases in which catheterization is possible, and in which the rupture is only interstitial. In interstitial rupture the sanguineous tumor resulting from the contusion may be absorbed spontaneously, but quite often it becomes inflated and suppurates and gives rise to abscess which opens either into the urethra or externally, or by both ways at once. In such cases external urethrotomy should be done as a prophylac-

tic. In rupture of the second degree, which is constituted by solution of continuity of the mucous membrane and of submucous tissue, if the rupture be very limited, the case may proceed as above, and resolution may take place without mishap. But if the wound of the mucous membrane be at all extensive, at each micturition a small quantity of urine penetrates the subjacent lesion, inflammation and suppuration follow, the tissues are rapidly destroyed and pus invades the perineum. In complete rupture the secondary lesion always assumes an extreme gravity. After an absolute, but temporary retention, sometimes the urine flows in abundance, the patient urinates, so to speak into his cellular tissue and there results an extensive infiltration of urine with all its consequences. Sometimes the bladder allows only a small quantity of urine to escape, this penetrates the bloody cavity, between the two edges and a urinary abscess follows. In either one case or another the skin sloughs at one or more points, and the result is the formation of a variable number of fistulae, which give exit at first to a mixture of urine and pus, and afterward to urine alone. The anterior part of the divided urethra is constricted more and more by the contraction of the peri-urethral tissues, and in some cases even its complete obliteration has been noted; the intermediate space resulting from the separation of the two sections of the canal shrinks gradually and becomes organized into fibrous tissue.

The ultimate consequences common to all ruptures of the urethra, to whatever variety they may belong, is stricture, and we all know the difficulty to be met in the attempt to radically cure such strictures. I believe that an early resort to external urethrotomy, even in cases which present only contusions, would greatly lessen the number of cases of contracted urethras or so-called traumatic strictures.

BIBLIOGRAPHY.

- (1) Lancet—July, 1883.
- (2) Abdominal Surgery 2nd. Ed.
- (3) La Semaine Medical Feby., 1899.
- (4) British Medical Journal, June, 1886.
- (5) Genito-Urinary and Venereal Diseases, White & Martin, 6th Ed.
- (6) Casper's Genito-Urinary Disease, 1906.
- (7) Genito-Urinary Surgery.
- (8) Surgery Gynecology and Obstetrics, Sept., 1906.
- (9) Ashhurst-International Encyclopedia of Surgery.
- (10) American Text Book of Surgery.

DIPHThERIA.*

By A. B. CAUDLE, NEWSTEAD.

"Diphtheria is an acute contagious disease. Characterized anatomically by an inflammation of the pharynx and upper air passages. Although comparatively a recent disease, in this country, it threatens to be the scourge of the large cities, and has invaded every nook and corner of the globe, 'till to-day it is one of the most common, the most dreaded and fatal disease of childhood, and I may add till the last ten or fifteen years one of the least understood.'"

True diphtheria is the product of the Klebs-Loeffler bacillus, either alone or in association with many other bacteria, and is primarily a local disease with many secondary symptoms, or manifestations. It is first a local trouble, but soon developing systemic symptoms, due to the absorption of toxins, which results from the growth of this micro-organism.

The Klebs bacillus is usually present in large numbers in the false membrane of all cases, of typical diphtheria, and is rarely or never found, in other inflammations of the mucous membranes. There is no doubt that in the vast majority of cases, the inoculation takes place, through some lesion of the mucous membranes of the skin, usually of the throat or upper air passages. Therefore, it would be hard to overestimate the importance of keeping the mucous membrane of the throat and upper air passages, in as sound, healthy condition, as possible, as a precaution against the spread of the disease.

The germ is usually propagated through the surrounding air, and brought in contact with the mucous membrane during inspiration and carried into the system, through some lesion in the throat or nose. The physician has frequently been the medium of transmitting the disease, from one patient to another, as evidenced by the number of cases that occur in their own families, hence you readily see the importance of thoroughly disinfecting yourself before going from a diphtheria case to see another patient.

Incubation: In experimental diphtheria, the duration of the incubation period is short, varying from twelve hours to three days. But when diphtheria is contracted in the usual way by inhaling air which contains the contagion this period may be much longer, varying from one day to twenty. However in the latter case, this only means the interval between exposure and the appearance of the disease, for there is no means of

knowing exactly when the contagion entered the mucous membrane, and how long it had remained harmless, waiting for some lesion through which to infect it. This period not only depends upon the quality, and quantity, of the infecting material itself, but largely upon the condition of the field, upon which the germs light. If they fall upon a healthy mucous membrane they are practically harmless, but if they light upon a throat already inflamed, laden with the streptococci, the field is soon made ready for the bacilli. If it be true that the diphtheria germ will not grow unless they come in contact with an abraded, or raw surface, you can readily see the importance of keeping everyone's throat in as healthy condition as possible, who has been, or is likely to be exposed to this malady.

I will now call your attention to the diagnosis and symptomatology. There is but one means by which we can be absolutely certain of our diagnosis, in all cases, and that is by the presence of the Klebs bacillus, which is found in no other disease. As most of us have no microscope and are not trained in microscopy, we have to rely on the symptoms largely for our diagnosis, but with proper study of our cases, can usually make a correct diagnosis. Cases that are most often confused with diphtheria, are follicular tonsilitis. With tonsilitis the constitutional symptoms are not so marked as with diphtheria. The patches in tonsilitis are confined to the tonsils and do not extend to the uvula and soft palate. The patches look like ulcers in the tonsils that are filled with a grayish, yellowish secretion, and do not run together and form a membrane as diphtheria does. In tonsilitis the exudate is easily wiped off and does not have a tendency to recur as in diphtheria. In diphtheria the membrane is of a dark, grayish color, is sticking on the surface of the tonsil and not into the body of the organ, is not in patches, and does not confine itself to the tonsil, but usually extends to the pillars of the fauces, uvula and to the soft palate, and sometimes into the posterior nares. The membrane is with great difficulty removed, and when removed leaves a raw, bleeding surface, that is soon recovered with another membrane. With diphtheria at some stage during the attack, if you will examine closely, you will almost always find albumen in the urine whereas in tonsilitis it is never found. If we will bear in mind even this rude classification of the symptoms of the two diseases, we will not often mistake one for the other. The characteristic features of a case of pharyngeal diphtheria, is the pseudomembrane, situated as above stated, on the tonsils fauces, and

* Read before the Christian County Medical Society April 18, 1907

frequently spreading to uvula and soft palate. The constitutional symptoms, which are the result of the absorption of the poison, vary greatly from the mildest to the most alarming. In some cases, causing death in a few hours. The temperature may be high, the pulse very rapid, or in some very grave cases, abnormally slow. My limited experience has been that the temperature, as a rule is low, usually from 100 to 102, occasionally 103, but the pulse is usually very rapid and weak, varying from 120 to 150 and out of all proportion to the other symptoms in the case. In treating children with throat troubles, where the diagnosis is in doubt, there are two symptoms, if present, I would warn you to give them their proper consideration, and that is, this weak rapid pulse, accompanied by albumen in the urine, which usually appears on the fifth day. These two symptoms have in more than one instance thrown some light on laryngeal cases, especially in cases that had not been seen until they had been sick several days. The child should be placed in a large, well-lighted room, with a temperature of about 70°, with plenty of sun light and fresh air in the room. The bed linen and clothes should be changed once or twice a day, the child should have a sponge bath, with alcohol at least once a day, to keep the skin active and help to eliminate the toxins from system. The food should be of the most nourishing and easily digested, fresh cows' milk, eggs, egg-nog, beef and mutton broths. The patient usually needs all the nourishment you can get it to take, if it will not take these foods by stomach, in older children it should be given by the rectum. As it is frequently a fight between the vitality of the child and the ravages of the disease, hence the importance of giving your patient all the support possible. Alcohol, some authors claim stimulates the flagging heart, while others claim it is neither a food, nor stimulant, but be that as it may, there is ground for the assertion that the alcohol has some good effects by naturalizing the septic process in the human economy. A mercurial purge, if the case is seen early, should be given. If the temperature is high, should be reduced with a sponge bath, and repeat as often as necessary to keep in reasonable bounds, the throat and nose should be kept as nearly aseptic as possible, with a spray of hydrogen dioxide one to six for the nose, or with a spray of menthol, carbolic acid, oil eucalyptol, liquor albolene. If the spray cannot be successfully used, a fountain syringe

should be substituted with sterile water, with mild antiseptics is one of the most effectual means of cleansing the nose and throat. The child should sit on the nurse's lap with its head and body well inclined forward, while the irrigation is being used. The flagging heart should be sustained with strychnia, nitroglycerine and digitalis. Some authors claim, a full dose of morphine and atrophine will sustain a flagging heart in diphtheria better than any other drug. The normal saline by rectum or hypodermatically would likely be of service in these desperate cases. It is not only one of our very best stimulants, but will help to hold in solution and suspension, the toxins in the system to be eliminated by the great sewers of the body, the bowels, kidneys and skin.

The serum treatment has now passed beyond the stage of uncertainty and experimentation. All physicians throughout the civilized world have accepted and adopted this mode of treatment.

When we look back and see the frightful mortality in severe epidemics, under the old plan of treatment, was from twenty to fifty per cent., and in all laryngeal cases from seventy-five to eighty per cent., while under the serum treatment, in the uncomplicated cases, where the larynx is not involved and where used in liberal doses early in the attack from the first to the third day, the mortality drops as low as eight to ten per cent. In the laryngeal form as low as forty to fifty per cent. For a child two to four years old, 2,000 to 4,000 units should be used, should the symptoms show no improvement in twelve to twenty-four hours, the dose should be repeated. The site for the injection varies, in young children most authors advise giving the injection in buttox or thigh, some prefer the subscapular region or flanks. The injection should be deep into the subcutaneous tissue. Of course you all understand the importance of rendering the field, as thoroughly aseptic as possible, then covering with some sterile dressing. Do not dismiss your diphtheria patients, as cured as soon as the acute symptoms subside, but keep them under close observation for several weeks after the acute symptoms have subsided. Give tonics as iron and strychnia till your patient is fully restored to normal health. Give antitoxin in all cases of laryngeal diphtheria and in all severe cases of pharyngeal diphtheria. Give it early in the attack, and give it in liberal doses. I believe the time has come when a physician is treating a severe case of diphtheria, and loses it, and has not used antitoxin will be threatened with a suit for malpractice.

PATENT MEDICINE.*

BY D. H. ERKELETIAN, LAYTONSVILLE.

It was more than a pleasure for me to write a paper on this subject, though the time since it was requested by our kind Secretary was very brief. I wish particularly to draw your attention to a paper I read before the Kentucky Medical Association in 1904 on "The Infancy of Patent Medicines," published in the September 1905 issue of the State Journal.

This paper will embrace the most important points laid out in that paper. Looking back to the history of medicine from the days of Hippocrates up to the present time, I cannot keep silent in declaring that the medical profession has taken marvelous steps toward making our profession a sound and staple art. Who can with a reasoning eye see the marvelous advances made by the profession in its various branches and still refuse to believe the fact that the progression of medicine in its entirety, glorious achievements made by the pioneers of medicine during the last quarter of a century declare to the world that God is with the physician. But I will do justice if I could only honor the school that gave birth to such brilliant sons, when we study the fundamental principle on which all these achievements are built we find that the progressive type of medicine requires. To master the man and his disease as it presents itself and treat it accordingly. This principle has been the sheet anchor of our old school, we as adherents of this school do respectfully invite, in the name of the cause of science, all homeopaths, osteopaths, eclectics, together with faith cures, mesmerists, water cures, Christian scientists, and very urgently the patent and proprietary medicine manufacturer to join us heartily, not in the spirit of enmity, but with the love of science, to accomplish the great end—to master the man and his disease. But unfortunately the regulars have suffered more from libelous attacks made by the cunning patent medicine manufacturers than all the rest combined. The patent medicine system has injured the cause of our school before it truly realized its venomous after effects, the time is not far when the reputation of our science will be destroyed. The existence of a flourishing state of patent medicines sold in the market, protected by the laws of the land, clearly indicate the fact that the people or the profession at large do not realize the injuries inflicted by them. These are the classes of people buying patent medicines (1)

those who are too poor to employ a physician (2) those who have no confidence in a physician. The first class is really unfortunate, he is poor because by his poverty some thieves are getting rich, but there is never a physician who turns a deaf ear to the sick poor, Physicians at large are the most sympathetic, broad-minded, charitable beings, their deeds not my words bear me out in this, consequently the poor has no excuse in declaring that he has to use patent medicines. The second class are the most pitiful. Their excuse is—well, I employ Dr. So and So, spend hundreds of dollars and my condition never any better, so I began to try patent medicines with the hope that if one does not do right, finally I will strike one that will cure me. Now let us study this man: first he has no confidence in physicians, he always thought physicians ought to accomplish miracles, he expected to find every physician the same in education or in treating diseases, after trying one or two he comes to the conclusion that they all have the same knowledge, so he gives up hope of deriving any benefit from them. I wish he could understand the fact that incompetency is another evil that the medical profession is combating against, that there is a vast difference in the way two physicians treat the same disease, he will spare no means to secure the right man to treat his trouble. In trying every patent medicine, in the end he will actually spend more money than he would by placing himself under the care of the most eminent specialist, yet still he is in the same condition or worse than when he left his last physician. Is it not better for him to abide in the methods of an honest physician whom he believes has sufficient knowledge to understand his case, than it is to trust the disinterested charlatan patent medicine inventor whose sole purpose is to absorb money, whose cunning advertisements are full of lies, whose products tend to form some drug habit?

The people suffer from the liberal use of patent medicines in four different ways: (1) waste of money, (2) waste of time, (3) some form drug habit, (4) loss of confidence in medical profession. The practitioner earns his income through the hard labors and many tedious hours spent in college, his ambition is never to accumulate a fortune, even the highest fee is very little compared to the value of the work he has done, though he fails in curing the disease at hand he always preserved the best and true interest of the sick. While on the other hand the patent medicine manufacturers have gone into the business for the sake of making money. What does Mrs. Lydia Pinkham care about Mrs. Smith, 2,000

* Read before the Christian County Medical Society May 20, 1906.

miles away. She has a scheme to treat her female troubles and sends her some flattering letters her customers have written, also some impressive remarks about her personal ability in handling female trouble, concluding with most pathetic remarks about the incompetency of the practicing physician, thus encouraged Mrs. Smith puts herself under the care of Mrs. Pinkham for six months for fifty dollars; she is repeatedly warned not to be discouraged, every now and then stimulating letters are written to her. She carries out every instruction, but at the end of six months she is in the same condition, minus the fifty dollars. Mrs. Pinkham's income every year through such source is tremendous, indeed more money is spent for patent medicine than for bread.

Among the injuries of patent medicines to the laity, the waste of time is the most important. People will try a patent medicine before they try a physician. They do not understand there must exist a natural power on the part of the body material of combat against disease; if this power is not protected the disease will proceed toward newer surrounding tissues until it is too late for any help from human source. In regard to the third injury. There is not a physician who will not come in contact with some who are slaves to either opium, alcohol, chloral, etc., as a direct result of the use of patent medicines, this very end of patent medicine traffic is directly and indirectly active in a vigorous campaign to degrade before the community the well established reputation of the old time-honored scientific medicine.

Cather up the innocent victims of this evil whose appeal has troubled only the physician you will eventually agree with me that the patent traffic is one of the chief causes that sever the home from the physician. This mutual disrespect between the home and the physician will never cease until a full compromise is restored by discarding the use of patent medicines.

Patent medicine traffic is a hindrance to the progress of the science and art of medicine. It never has been a helpmate to our profession and cannot possibly be one because: (1) it tends to destroy the fundamental principle of medicine, research by reason, (2) the etiology, pathology and symptoms of a disease varies in different climates, (3) even under the same climate the same course of treatment can not bestow the same benefit to all individuals alike, even if there was introduced into the market a patent medicine claimed to be specific for certain diseases it would be impossible for us to change some of the ingredients according to the adapt-

ability of our patient. The physician should know the physiological action of the drugs indicated and prescribe them in accordance with his observation of symptoms.

Here is one of the thousands of patent medicine advertisements: — "A wonderful discovery Kora-Kora, cures Bright's disease, dropsical swelling, congestion of the kidneys, indigestion, dyspepsia, yellow jaundice, nephritis, diabetes mellitus, lumbago, catarrh of stomach, stone in bladder, cancer of stomach, colitis, female irregularities, rheumatism." If Kora-Kora cures diabetes mellitus I would like to know which route it takes to regulate the menses, if this dear old drug makes an attack upon nervous debility, I would like to know what process it would follow to start a campaign against yellow jaundice? The practical impossibility of such claims is now more obvious than the theoretical improbability. Therefore, I am safe in declaring that any patent or proprietary medicine whose formula is not given is maliciously injurious to the welfare of our commonwealth and the presence of any patent medicine whose formula is known to the public is a menace to the promotion of medical science. A most depressing state of affairs is to notice the practitioner of medicine prescribe patent medicines. What a humiliation! What cowardice! Just think of a physician who attains the high rank of an M. D. belittling himself to be a tool in the hands of thieves. Do you not sympathize with a physician who is so ignorant that, for the sake of convenience, prescribes patent medicines?

It was not convenience, the plain fact is he could not do any better. It matters but little before the medical body whether a physician is a Christian or atheist, whether he belongs to a lodge or not, a spendthrift, a gambler or drunkard. It is infinitely more important for the laity and the profession to know whether he prescribes patent medicines. Are the pharmacists and physicians co-workers? If so, why do the druggists prescribe and treat people? Why do they recommend certain preparations rather than a certain doctor? Their chief excuse is that there is a demand for them. There is not a druggist that does not know that the majority of patent medicines are worthless and have no medicinal qualities, also that the same patent medicine they recommend to others they would not give to their family. Yet in the face of all these facts the druggist who claims no homage to deceit, puts his name in the book of crooks, becomes an agency for those whose motto is—"spare no means to get rich."

The druggist of to-day shows symptoms of degeneracy. If every county society resolved

to patronize only such drug stores that strictly abide by the laws of medical ethics, we would soon be able to stamp out patent medicine evils. Another important attack can be made upon the nostrum evil by teaching the public. The patent venders approach the people in many ways, some offer a guarantee to cure, some distribute almanacs, circulars with testimonials, hire the pastors of churches to speak a good word about them, some call upon the daily and religious papers and magazines.

The solution of this problem depends entirely on the efforts of the medical profession. Summing up the necessary measures to combat against the nostrum evil I will conclude:

(1) The practicing physician should not indulge in prescribing or encouraging the sale of patent or proprietary medicines.

(2) Drug stores must be prohibited from selling any drug without specific demand from a regular practitioner.

(3) Teach the laity the grave consequences resulting from the indiscriminate use of unknown remedies.

(4) The creation of a national board for the purpose of investigating as to the merits of all preparations applied for a patent.

It will require the united effort of our profession to bravely battle against the great evil.

MEDICAL TREATMENT OF GALL STONES.

[The following closing discussion of Dr. Bates' paper on the above subject in the June JOURNAL was omitted, and it is published in order to complete the record:]

Barnum had a parrot that was in the habit of sitting on the shoulder of the ticket agent. When the crowd would shove and push about the ticket stand the agent would say, "One at a time, gentlemen, one at a time."

The ticket agent was also the advance agent of the circus and often the parrot would perch on his buggy as the agent went from town to town. Upon one trip the parrot disappeared. The agent went back some miles before the familiar tones of the bird could be heard. There in the midst of a cornfield, surrounded by a flock of crows who had plucked all but a very few of his feathers. But the parrot was vigorously saying, "One at a time, gentlemen, one at a time."

I may have but few feathers left, but "One at a time, gentlemen," I believe they will be replaced.

First of all I want to say that the beginning and end of surgery is to correct any mechan-

ical deficiency demanded. When this is accomplished then surgery is no longer needed.

Another statement that I would like to make is that the surgeon or the physician who does not assume the responsibility for every statement he makes at the bed side is too contemptible to come under the consideration of this society.

Now, in regard to those of the gentlemen in discussing the paper who referred to the fact that more drugs had been mentioned for the treatment of gall stones than they knew to exist in the materia medica, I would say that it was for that very class that some knowledge was given along that line.

Most of the proof given in the paper was taken from surgeons. In regard to these very statements, every case mentioned in the paper was taken from statements of the best surgeons. Kerr himself when sick with gall stone disease went to Carlsbad.

Some one this evening has mentioned a case where two or three small gall stones were found at the operation on a certain patient. The patient suffered from continuous jaundice that recurred at her menstrual period. She died in a few days of secondary hemorrhage. At a post mortem a stone was found low down in the common duct. It was not found at the first operation, although the patient was operated on by one of the best surgeons in the city.

Deaver's article shows that fifteen per cent. of the patients operated on for gall stones have no gall stones. This suggests a lack of diagnosis. With regard to jaundice as a symptom, I wish to say that not a single medical paper mentions jaundice as a symptom unless they mention it as occurring in about one-fourth of the cases. The only person that mentions it as occurring in fifty per cent. of the cases is a surgeon.

In regard to the proof of the diagnosis. Just here I would like to report a case that I had not intended to bring out in this paper, but in my paper that shall be read before the Kentucky State Medical Society. This patient had been under observation for some time and a diagnosis of enlargement of the liver together with gall stone disease had been made. This patient had been under treatment for six weeks. Had been relieved of the colic, but was still taking medicine. In my absence another attack developed. It came under the observation of a practitioner who confirmed the diagnosis and an operation was suggested. One of the best operators saw the case in consultation. The statement was made to the patient by the surgeon that the gall bladder was as large as a cocoanut and might rupture at any minute and that she ought to go to an in-

firmly and be operated on at once. On account of the enlargement of the liver I asked the gentlemen present if they thought there was any other condition present. They did not. Then I opposed the operation because I did not think there was a mechanical obstruction there. This patient passed a quantity of coffee ground or gravel like substance. This patient was carried to the infirmary three days afterwards; this gravelly material continued to pass away. Whether the surgeons made an examination before they put her on the table I do not know. When put on the table and the incision made the operator said the adhesions showed that gall stones had existed, but the gall bladder was now empty. Three doctors had made the diagnosis—one a surgeon and two practitioners. The surgeon found adhesions due, he said, to gall stones, but did not find any stones in the gall bladder at that time. The patient died six weeks after the operation. Bilirubin-calcium like gravel had been evacuated. I leave it to any fair minded individual the conclusions.

There is another case in the city that I would like to mention. The practitioner in the case is here, the surgeon is not. The patient was seen by a practitioner who does not believe in the medical treatment of gall stones. He was seen by the surgeon three times. They insisted that the patient go to the infirmary as they feared a rupture of the gall bladder. I was called to meet these gentlemen. It was their case. The patient objected to going to the infirmary. It was insisted that the doctors should make their statements in the presence of the patient and here is where the disagreeable part of it arose. The patient asked me whether I thought it was necessary for him to go to the infirmary, and I assume responsibility for every statement made and the man who does not is not worthy to practice medicine, and I told him I did not think it was necessary. I believe that those gentlemen thought he had gall bladder disease. Neither made the statement that gall stones were present. An enlarged gall bladder existed with more or less obstruction of the hepatic flexure of the colon. The statement was forced from me. We had to use very plain terms in the presence of the patient. After explanations the patient elected to remain at home. The surgeon had gone so far that he had seen the patient three times and he made the statement that rupture of the gall bladder would certainly occur and the patient die. I then asked him if the patient recovered would he

still say that he needed surgery. The answer was in the affirmative. The patient elected to remain at home. We had a definite condition of the gall bladder and the colon, definite remedies were prescribed for a practical purpose and in two weeks he was well and has had no recurrence. Now, what do we conclude from that? Here are two instances, recognized as gall bladder disease by every one who saw the cases, cured without resort to surgery. The last mentioned patient was cured at home. I ask the surgeons and physicians that witnessed these cases to state the facts as they occurred, if in the least I have misrepresented.

In regard to the position taken by one of the practitioners, that the surgeons call in the general practitioners in these cases (Sidney Meyers). I believe that in such cases as need surgery that the operation should be performed by the surgeon, but when the gall stones are removed, then the general practitioner should treat the systemic condition. I believe that where the condition is purely mechanical that the condition ceases with the establishment of drainage as John Wathen says. Drainage is all that is necessary. Where the systemic condition is going on after the removal of gall stones, drainage will not prevent the recurrence of this condition.

In regard to Dr Hendon's question as to how much olive oil is needed to dissolve a gall stone, I will say that if he will tell me the amount of cholesterol in the stone and the amount of oleic acid and lecithin in the olive oil I will answer him. That this olive oil is taken up and excreted by the mucous membrane of the gall bladder has been demonstrated.

In regard to the experiments carried on by Dr. Bullitt and myself, he will admit in the first place as he says that the stones were old. We do not know the exact composition of those stones, but even these old gall stones the doctor remembers were a little bit lessened in size and weight, particularly the ones in turpentine and ether and also those in olive oil. Both of us recognized the crudity of this experiment. I think if he would give me some fresh stones I could make a satisfactory experiment.

One other question in regard to the anatomical conditions, if such a thing as an atrophic condition of the gall bladder is brought about so that the mucous membrane of the gall bladder may not excrete lecithin or oleic acid. Then a surgeon will be needed. It has not been claimed that medicine reaches all cases; that the majority of the cases are relieved and cured by medicine is maintained.

COUNTY SOCIETY REPORTS.

Adair.—The Adair County Medical Society met May 9, 1907, with the following members present:—R. Y. Hindman, President; U. L. Taylor, Secretary; W. F. Cartwright, William Blair, W. R. Grissom, W. T. Grissom, G. T. Simpson, E. T. Sallee, J. T. Hammond, C. M. Russell, S. A. Taylor, E. B. Atkinson. The largest attendance that we have had at any meeting. G. T. Simpson gave us a talk on Cerebro-Spinal Meningitis, which was discussed by nearly all the members present. U. L. Taylor read a paper on Edysipelas, and the connection between it and puerperal peritonitis. Quite a number discussed the paper, which brought out several good thoughts. G. T. Simpson presented two young men before the society, who had had typhoid fever. One of them had a largely swollen leg, the other stricture of the oesophagus. This last had been treated by Dr. Roberts, of Louisville, who found the gullet completely closed. He is so far recovered now, that he passed before the class, a probang at least one-half inch in diameter without pain. He can swallow water and can take solid food, by thorough mastication. The following members paid their dues:—William Blair, W. R. Grissom, W. F. Cartwright, C. M. Russell, U. L. Taylor, S. A. Taylor, W. T. Grissom, E. B. Atkinson. Our next meeting will be on the first Thursday and Friday in August, in connection with the Russell Springs Medical Society which will meet here at that time. U. L. TAYLOR, Secretary.

Anderson.—The Anderson County Medical Society met at the office of Dr. Lillard June 3, at 2 P. M. No program was prepared for the meeting, as matters of a business nature were before the society. While waiting for some of the members to come in the doctors present engaged in a discussion of the dangers of chloroform and cocaine anesthesia. Drs. Kavanaugh, Toll, and Lillard cautioned extreme care in the use of cocaine as its bad effects were quick and alarming. They agreed that whiskey was the antidote to use and that it was an excellent idea to have it around the office for just such emergencies. Dr. Crume presented a case to the society for its opinion. After the patient was examined by all present, it was pronounced to be a ruptured vein in the propliteal space. The society then went into an interesting business session and matters pertaining to the upbuilding of the profession, the elimination of quackery, and the Great American Fraud were discussed at length. Definite action was taken on these questions, especially in this county, and more good results will come from this

meeting than any we have had for a long time. A Committee on Legislation was appointed as follows:—Drs. Kavanaugh, Lillard and Crume. Those present at the meeting were:—Drs. Kavanaugh, Lillard, Crume, Pindar, Townsend, Milton, Simpson, Gilbert, Murdock. The society will meet on July 1st, with Dr. Crume at Fox Creek. J. W. GILBERT, Secretary.

Cumberland.—The Cumberland County Medical Society met at Marrowbone in the Pace Hotel April 24, 1907. Present, H. L. Cartwright, W. C. Keen, Hub Davis, W. S. Taylor, R. L. Richardson. Visiting physicians, Drs. Palmore, of Monroe County, Ky., P. W. Bushong, of Metcalf County. H. L. Cartwright was called to the chair. As we did not have any cases to report, W. C. Keen read a paper on "Fissures of the Rectum." He emphasized the importance of knife treatment. The paper was discussed by all the physicians. Dr. Palmore believed a great many could be cured by division. H. L. Cartwright concurred with Keen; he believed in operative treatment. A motion was made and carried to adjourn for dinner until 1 P. M. At that hour the house was called to order by H. L. Cartwright. W. S. Taylor read a paper on "Puerperal Eclampsia." He emphasized the importance of educating the laity to put their wife under the care of a physician, two or three months before confinement so the physician could make urinalysis every two or three weeks if he found albumen or casts, if specific gravity was too high or low, they could be given proper treatment. His treatment for the convulsion was morphine, and chloral. The paper was discussed by all the physicians, each one reporting cases, and giving their treatment. W. C. Keen believed in venesection and reported cases treated successfully by phlebotomy. Cartwright believed in the elimination treatment. He believes when we are called to see a case of eclampsia if we would treat cause instead of convulsion we would be more successful. Dr. Palmore said the women in Monroe County never have any puerperal eclampsia. If he was called to see a case he would give veratrum viride. Davis, and Bushong agreed with this treatment. Richardson reported several cases he had treated with morphine, and chloral hypodermatically without the loss of a case. The society voted to express our sympathy to Hub Davis, for the loss of his brother who died in California a short time ago. We also wish to express our thanks to the visiting physicians for their presence and good help. We also wish to express our thanks to Mr. and Mrs. Pace for their good entertainment.

May 22nd.—The Cumberland County Medical Society met at Burkesville, May 22, 1907. Present, J. G. Talbot, H. L. Cartwright, W. S.

Taylor, Hub Davis, Albert Sharp, R. L. Richardson. As our President Sharp did not get in very early our Vice-president, J. G. Talbot, occupied the chair. The minutes of our last meeting were read and adopted. We did not have any paper for this meeting, but had some very interesting cases reported. The following is our program for our next meeting:—"Inflammatory Troubles of the Antrum of Highmore, Diagnosis and Treatment," by H. L. Cartwright; "Gastro-Intestinal Gripe, Diagnosis and Treatment," Robt. L. Richardson; Address by Dr. Albert Sharp on "County Organization;" "Croup," H. Chism.

ROBT. L. RICHARDSON, Secretary.

Bath.—The Bath County Medical Society met in J. H. Taulbee's office at 1 P. M. June 10th, 1907, with A. W. Walden, President, in the chair. The following were present:—J. H. Taulbee, W. S. Reeves, B. Cornelson, F. P. Gudgeon, A. W. Walden, H. J. Daily and J. Wilson, of Rowan County Society. Clinical Reports.—F. P. Gudgeon reported a case, a young woman 24 years old, pregnant for 3 to 4 months, about 7 days previous was threatened with an abortion; on digital examination found a tumor which occluded whole pelvic cavity, could find the meatus urinaris only with great difficulty. Catheterized her and drew off 3 quarts of measured urine and left a residue. Now upon digital examination found uterus high up in pelvis and completely everted. Corrected mal-position and had no further difficulty. It was moved and seconded that our next meeting be held at the Olympian Springs July 11, 10 o'clock. Chair appointed H. S. Pierce to bring in a paper on any subject selected by him. The following question was proposed for debate:—"Resolved, That in the present state of our knowledge, we are as apt to give the wrong medicine 50 times out of 100 as the right?" W. S. Reeves and Wells, affirmative; J. W. Jones and Stone, negative. A motion was made and seconded that a committee be appointed to revise the schedule of fees for Bath County. Taulbee, and Daily were appointed to draft these resolutions and get the signatures of all physicians in the county to them. Jerry Wilson was elected to membership in our society. There being no further business the society adjourned.

H. J. DAILY, Secretary.

Henderson.—The Henderson County Medical Association met in the office of Arch Dixon, June 10, 1907, with Drs. Dunn, Moseley, Letcher, Bethel, Hancock, Quinn, Dixon, and Griffin, present. In the absence of the president and vice-president, the secretary called the meeting to order and Dr Hancock was selected to preside. The minutes of the all-day meeting being

incomplete, were passed. No clinical cases were reported. Papers:—Dr. Hanner, who was on the program for a paper on "Interstitial Nephritis" was absent. Dr. Dixon read a paper on "Parenchymatous Nephritis," in which he discussed the most serious and important type, the acute form, contrasting exudative and productive nephritis. He gave cardinal symptoms, which, with the types of cases vary. Some recover, some go into a chronic stage, while others have intervals in which the patient seems well, though each succeeding attack is more severe until the patient goes into a comatose condition and dies. But the severe progressive cases are the most to be dreaded, and from which less is expected in the management. The majority of all cases of acute productive nephritis terminate unfavorably, though it is not wise to give too unfavorable prognosis, as surprising results are sometimes secured. Treatment: Diet, milk if beneficial, which is only ascertained on trial, digital, morphine. For the dropsy, which is most difficult to treat, in addition to digitalis, spartan and strophanthus are beneficial, in conjunction with colagogal cathartics. For the patient's comfort tap abdomen, and puncture the skin of the leg if necessary. Discussion: Dr. Letcher. —One of the most important points in the management of a case of nephritis is the necessity for an early diagnosis. We should also endeavor to be sure of the type. In this way we can the more successfully manage our cases. In my experience you can't always depend on the presence of albumen in the urine, casts being most to be relied upon. Under treatment I think it important to keep the patient in bed. The use of a saline solution of bi-carb. soda by bowel is of advantage. The normal saline solution being avoided by some authorities at present. For the dropsy, warm baths and diaphoretics have a beneficial effect, but must be carefully used.

Dr. Moseley.—I believe in dropsy to relieve the already over-taxed kidney, we should early evacuate the accumulated fluid in the cavities, even though they do soon refill.

Dr. Dunn.—Since I ceased to do general practice I have seen very little nephritis, except in those cases in which the eye is involved. It is estimated that 22% of all cases of nephritis show effect on the retina. I find it difficult to make a differential diagnosis between a diabetic and nephritic retinitis. Recently I had a case come to me of a nephritic retinitis in which repeated attempts to fit glasses had been made by an optician, all proving futile. On examination I found urine loaded with albumen. The case was referred to a regular practitioner and under proper treatment his life was prolonged two years. The effect on the retina in an effort to fit glasses is often the first intimation the patient has of his true condition. So in the premature

failure of vision a proper examination of the urine is always advisable.

Dr. Griffin.—I have had several cases of nephritis in the last few years, in which I had gotten fairly satisfactory results. The compound jalop powder has often proven useful. From the use of the normal saline solution per rectum I have gotten apparently good results always, and I seriously question its contra-indication.

Dr. Bethel.—I usually use, in all cases of nephritis, the hot normal saline solution into the bowels and get good results. For that comatose condition with the urine heavily loaded with albumen its use will temporarily relieve. I had a case recently of a man in extreme coma, who was sufficiently revived by its use to make his will and dispose of a large estate, his mind remaining clear for 36 hours, lapsing into coma and dying.

Dr. Hancock.—I am personally interested in this subject and glad to discuss it. The possibility of differentiating the different forms of nephritis is important. The literature, and practitioners in general are not united in classification, the subject being indifferently discussed without an exact classification. The more we study the subject, the further away from the kidney are we apt to get metabolism perhaps, more than any other one thing, enters into the cause of nephritis. Our habits, what we do and how we live, what and how we eat and drink, will perhaps in our future study of the subject be found important factors in the causation of nephritis. So we shall more closely study the causes of irritation, metabolism and elimination. As to the management, if you have an inflammation of the kidney productive in character, if due to irritation, the removal of which will stop the process. The possibility for a complete recovery is not always satisfactory.

Dr. Dixon, in closing.—It is true that much care is required in the differentiation of different forms of nephritis. Even the authorities are not in harmony and their classification is confusing, so it is necessary for us to use more care in making a diagnosis and to more frequently examine urine, of suspected cases. But a word of caution; the presence of albumen does not necessarily mean you have a case of nephritis. In regard to the chlorides, most authorities at the present day avoid them, because their use seems to produce certain chemical changes detrimental to the proper action of the kidneys.

An out-doors meeting June 24 at Atkinson Park at 4 P. M. with a chicken roast for a lunch was suggested and on motion Drs. met May 14, 1907, C. W. Froedge presiding, pointed a committee with power to act to arrange for the meeting and arrange the program continuing the discussion of the kidney. On motion the secretary was directed to invite Dr.

Leon Bauldauf, of the Bender Laboratory, Albany, N. Y., who is home on a vacation to write a paper on the "Pathology of Nephritis" for this meeting. The program will be as follows:—"Pathology of Nephritis," Leon Bauldauf; "Chronic Parenchymatous Nephritis," J. M. Moseley; "Interstitial Nephritis," D. O. Hancock; "Scarlet Fever," J. H. Letcher. A motion prevailed that each member assist in preparing the program for the last six months of 1907, by mailing or handing to the secretary a list of five subjects, which he would like to have discussed, indicating his choice of subject on which to write a paper. Society adjourned.

SILAS GRIFFIN, Secretary.

Barren.—The Barren County Medical Society met May 14, 1907, C. W. Fordge, presiding. Members present, E. L. Patmore, J. C. Jordan, J. B. White, J. M. Taylor, A. T. Botts, S. T. Botts, J. B. Honeycutt, J. G. Siddens, J. J. Jepson, R. E. Garnett, R. H. Porter, J. S. Leech, W. T. Britt, and R. S. Plumbee. A number of clinical cases were reported, but the most interesting was a case of hematuria reported by A. T. Botts. As "the uses and abuses of quinine" was a subject for discussion, and of course, considered, the case of supposed malarial hematuria in a pregnant woman, some favoring, others opposing the use of quinine in hematuria; some favoring, others opposing quinine in pregnancy.

The therapeutic use of ichthyol, iodine and strychnine were discussed. The fact was brought out that the laity is becoming addicted to the use of strychnine as it is morphine and other narcotics.

Resolutions adopted in respect to the memory of Dr. F. J. Taylor, by the Barren County Medical Society:

Dr. F. J. Taylor died at his home at Glasgow, Ky., April 21, 1907, in the seventy-first year of his age.

Dr. Taylor was born in Adair County, of a highly esteemed family, his father being a prominent minister of the Gospel.

Dr. Taylor filled many positions of trust during his life, and at no time was he ever known to swerve from a duty. The greatest things that can be said of any man can be said of Dr. Taylor, viz: that he was a good man and true. These characteristics were especially marked in his devotion to his family, and about the hearthstone, the place to try a man's true greatness. He has been an active member of his society since its formation, and to his unceasing efforts is the success of the society greatly responsible. Hence the following resolutions:

1. That in the death of Dr. Taylor, this society loses one of its most useful members, in

all that the word useful means, and one that was dearly beloved by all.

2. That the community loses one of its best and most useful citizens, and the church a Christian brother.

3. That we extend the surviving members of the family our deepest sympathy in the loss of a faithful husband and tender and loving father.

4. That these resolutions be published in the county papers and Kentucky Medical Journal.

J. B. WHITE,
E. L. PALMORE,
R. S. PLUMLEE,
Committee.

Green.—The Green County Medical Society met in the office of O. H. Shively Thursday 10 A. M., May 2, 1907, with the following doctors present:—E. L. Thompson, President; D. G. Fragg, J. M. Williams, W. E. Settle, J. J. Booker, J. W. Wilkerson, Alexander Shively, O. H. Shively, E. L. Strader, H. P. Honaker, J. D. Lee, of Hart Co.; and B. M. Taylor. Dentists J. M. Johnston, W. B. Helm, and W. W. Taylor.

The forenoon was occupied in the presentation of interesting cases. O. H. Shively reported three cases of ulcerative pharyngitis occurring in the same family, due to streptococcus infection. The trouble at first visit was thought to be diphtheria and a microscopical examination was at once made and found to be due to streptococcus infection. The ulcers were covered with a dirty mucopus. The treatment was the application of peroxide and a ten per cent. solution of nitrate of silver. The ulcers healed rapidly. There was severe constitutional symptoms attending the infection.

B. M. Taylor reported two interesting cases of puerperal septicaemia. A negress was delivered by a colored midwife. She developed sepsis and he was called in after she had been sick for three weeks. Upon examination he found an abscess in the left broad ligament the size of a cocoanut. She would not submit to opening the abscess and she was not seen again for three weeks. At the second visit he found that the abscess had burrowed its way between the abdominal muscles and had pointed about an inch below the ribs a little in front of the axillary line. This was opened under local anesthesia and about a pint of pus escaped. The body was placed to favor drainage through this opening. The inflammatory condition, in the pelvis rapidly subsided and in about three weeks the abscess was healed. The patient rapidly recovered and has since borne a child.

The second case was a primipara accidentally infected. She had a child thirty-six hours after delivery. He and O. H. Shively saw the case on

the third day after labor. She was profoundly septic. A laceration in the perineum and several small ones in the vagina were infected and were covered with pus. The infection had extended into the uterus. The infected parts were carefully and thoroughly cleansed. A dull curette was carefully used to bring away any debris. A strip of sterile gauze was inserted into the uterus and the vagina and the laceration was packed with gauze saturated with a ten per cent. solution of ichthyol in glycerine. This was removed at frequent intervals and the uterus and vagina thoroughly cleansed with normal saline. Antistreptococcus serum was given every four to six hours and if the temperature and pulse began to rise above 104 and 120 respectively, the dose was doubled. The infection in the perineum, vagina and uterus subsided in about five days and the patient began to rapidly improve. For three weeks an infection in the left broad ligament which had extended up the lymphatics from the perineum and vagina caused considerable anxiety. The temperature would be normal until 1 P. M. and then rise to 101 by night. Pulse remained about 80. The trouble subsided without an abscess. Thirty-six doses of serum were given. The patient has recovered nicely. The serum was given a test in this case. The effects were highly gratifying. It seemed to modify or combat to a great degree the severe effects of the sepsis that she was absorbing. The pulse was better, the temperature lower, the skin cleared up, the tongue at once became moist, the shock was not near so great, in other words, many of the sharp edges were taken off and the chances for recovery doubled.

Dr. Honaker reported an interesting case of cancer of the liver in woman aged 63. The interesting feature in the case was the close proximity of the growth to the blood vessels causing obstruction to the circulation while the growth had caused very little enlargement of the liver. The abdomen had been tapped twice in three weeks and each time three gallons of fluid withdrawn.

At noon a delightful lunch was served in the consultation room of Dr. Shively's office.

The afternoon was devoted to the essays. E. L. Strader read a paper on "Everyday Asepsis." He said that Everyday Asepsis is the kind that doctors should practice every day in their practice. He spoke of the carelessness in the use of the thermometer. That many physicians never thought of cleaning a thermometer and would take it from one patient's mouth and place it in another without thinking of the many chances to infect the patient. He spoke especially of the necessity of protecting the obstetric cases by wearing an apron or gown over the clothing. That many physicians go to their stables and

often curry their horses before riding or driving it to the case and in summer time the clothing is often covered with dust from the highway, and in this way making it extremely dangerous unless a gown or apron is put on to protect the woman. The paper was discussed by all present.

B. M. Taylor read a paper on "The Pregnant Woman." All present entered into the discussion of the paper.

The Green County Medical Society promises to be one of the most active in the State.

We will meet again July 4th, not to celebrate our independence, but our dependence upon each other.

B. M. TAYLOR, Secretary.

Logan.—The Logan County Medical Association held its regular meeting at the court house in Russellville, May 6, 1907, at 10 A. M. with quite a large attendance, also a number of visiting physicians, among them J. H. Blackburn, Vice-President, and E. Rau, Councilor for the Third District of the State Medical Association. Several papers were read and cases reported. J. H. Blackburn read a paper, "Diagnosis of Intestinal Obstruction," a very interesting paper, and showed thorough work on preparation, and left little room for discussion as it seemed to cover the whole ground. D. G. Simmons reported a case of that character. M. E. Alderson also related a case of obstipation in which olive oil was internally and successfully used. J. K. W. Piper related a case of impaction of the transverse and descending colon, in which high enemas under anesthetics were successfully used. W. K. Smith read a paper on "Perineal Lacerations and Their Repair." This was also an excellent paper and was thoroughly discussed by most of the members present. M. L. Brodie was of the opinion that a law should be enacted making it a misdemeanor for any physician to fail to repair a lacerated perineum. J. H. Blackburn thought that the symptoms that may come on later in life, because of a small laceration, should be taken into consideration and the lacerations always repaired, and, unless the operation of repairing is thorough, there should be a secondary operation where necessary to prevent the prolapse of the vaginal wall and the accompanying symptoms which develop later on in life. T. O. Helm reported several cases where lacerations, having occurred during first labor, and having been repaired did not recur at subsequent labors. C. L. Venable was of the opinion that oblique lacerations frequently caused more trouble than median lacerations and that they were more frequently caused by the shoulder than by the head. W. W. Lasley has observed frequently that when the repair was done immediately and when there was so much swelling present, that when the swelling lessen-

ed the stitches frequently became loose and were difficult to tighten, and that it was frequently better to wait a few hours for the swelling to go down. W. R. Burr was also of the opinion that waiting 12 hours to allow the swelling to recede was a good plan. J. R. Crittenden thought that hot water applications would cause the swelling to be reduced in a short time. A. M. Crittenden believed that in the majority of cases it was better to repair the lacerations on the following day. D. G. Smith preferred to operate immediately if possible, and use a continuous cat-gut suture for interior and silk for exterior, the stitches to be drawn very tight to prevent secretion from getting between them. J. K. W. Piper was of the impression that when he could count on the swelling receding in a very short time, that we were frequently justified in drawing the stitches tighter than we should under other circumstances, and that hot applications applied before or after the stitches were introduced would cause the swelling to recede more rapidly.

E. Rau gave a very interesting discourse upon the relation of nasal diseases to neuralgia of the front part of the face and head and said that many of the neuralgias attributed to the eye, were of nasal origin. This discussion of E. Rau was very thorough and interesting, and was thoroughly appreciated by the members of the Association.

J. H. Blackburn gave an interesting talk on "Proprietary and Patent Medicines" and mentioned many of the synthetic preparations, as pseudo-patent medicines and included in the list such medicines as Ammonol.

D. G. Simmons thought we could make a more careful study of the physiological action of a few drugs and be more successful than with a less careful study of a great many.

The question of druggists prescribing and doing a drug store office practice, was discussed and condemned.

A resolution of thanks was offered to J. H. Blackburn and E. Rau for their excellent papers and discussions.

The association adjourned to meet again in Russellville on June 3, 1907. After the adjournment, the members of the Association and the visitors were entertained at dinner in a most excellent manner by the association's President, Walter Byrne and Mrs. Byrne. The meeting was one of the best in the history of the association and the social feature was one of the most excellent and thoroughly enjoyed events of the kind ever given in Russellville.

J. K. W. PIPER, Secretary.

Monroe.—The Monroe County Medical Society met at Tompkinsville Thursday, May 2. Drs. (Continued on Page XX.)

SUPPLEMENT TO KENTUCKY MEDICAL JOURNAL.

BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION.

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JULY, 1907.

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ter always preferred than are several methods. The injection method, operation by ligature and operation by clamp and cauterizing, the latter preferred. Fissure of the anus is an irritable ulcer at the aurod orifice, causing spasm of the sphinster musele. Treatment consists in divulsion of the sphinster and increase flow of fissure.

Next paper read by R. W. Frey on "Diagnosis and Treatment of Appendicitis." We have several so-called varieties: acute, chronic, relapsing or recurring, perforating, gangrenous, catarrhal, and tubercular. These are, however, different stages or conditions of the same disease save that of the tuberculous type. Diagnosis not difficult in well-marked case of the adult male, but difficult when complicated, in children, and females. The diagnosis in children should always be made tentatively, even after a most painstaking and careful examination of all the organs. Many have been sent to the operating table who were suffering from some other disease, notably entero-colitis, pneumonia or pleurisy. A few hours' delay, however, will clear up the diagnosis, when patient will assume the characteristic position on back, body turned slightly to right and right limb flexed on abdomen. In the successful management of this disease, much depends on the individuality of the physician, that is to say, on the acuteness of his observation and sound judgment in weighing the nice points in diagnosing the condition of the patient. More important than diagnosis of the disease itself, if possible. Appendicitis is so obviously a surgical disease that any physician should be ready to operate or to have it done at a moment's notice should

the necessity arise. The medical side of the disease is very limited, but very important, and consists in emptying the alimentary tract at once. Especially if patient has eaten a full meal. Patient must be allowed absolutely nothing by the mouth after the bowels have been emptied for 12 or 24 hours. After this hunger and thirst may be relieved by nutriment enemas in 1 pt. normal salt solution. Should temperature and pulse-rate arise, or a sudden drop of both, with increased pain, operation should be done at once, sooner the better. This concluding the program for the day, Pembroke was selected as the next place of meeting with the following programme:—"Office Gynecology," by R. W. Frey; "Relation of Druggist and Doctor," by C. W. Lester; "Proprietary Medicines and Our Use of Them," by W. S. Petrie. There being no further business the meeting adjourned to meet at Pembroke first Wednesday in July, 1907.

D. TRABUE, Secretary.

Jessamine.—The Jessamine County Medical Society met in regular session at the office of T. R. Welch, May 24, 1907. Following members were present:—Fish, Barnes, Matthews, Welch, Pearson, Pentz, and VanArsdall. John Baldwin of Baltimore Medical College was a welcome visitor. Minutes of previous meeting were read and adopted. Dr. Fish reported an interesting case of constipation with impaction in the colon, which he successfully treated with high enemas of a warm boric acid solution, followed with solution of the aqueous extract of hydrastis. Dr. Barnes led the discussion and reported similar case treated with high anemas very successful.

ly, all the members entered into the discussion and complimented the physician on the management of the case and the favorable result. Dr. Matthews read a paper, "The Use of Chloroform in Labor." The author believes it one of the greatest boons to suffering women, and that it should be used in the majority of cases in the latter half of the last stage of labor. The author called attention to some of the contraindications to the use of chloroform in labor, a weak heart, post-partum hemorrhage and kidney disease, but well armed as the obstetrician of to-day should be he believes that these dangers are almost nil. Dr. Pearson led the discussion and called attention to the new anesthetic, the hyoscine-morphine-cactin compound. All the members took part in the discussion, and in the most important features of the subject they agreed with the author, all uniting in announcing it an excellent paper. The secretary called the attention of the members to the fact that the annual dues should be paid at once. Drs. Welch and Pearson to read papers at the June meeting. Society adjourned to meet at office of Dr. Fish June 20 at 7:30 P.M.

J. A. VANARSDALL, Secretary.

Warren.—The regular meeting of the Warren County Medical Society was held in the doctors' club room Wednesday, June 12, 1907, with twenty-five members present, and Dr. Bateson, representative of the American Medical Association, as guest of honor. The President, W. C. Simmons in the chair. The society was opened with a paper on "Enterocolitis" by W. C. Simmons. T. W. Stone spoke on "Infant Feeding" as follows: The women in town have been working during the local option to save our boys. The doctors should work to save the babies as the mortality is very high during the hot weather. First, encourage every mother to nurse her infant as breast milk is the ideal food. At birth the child's stomach is small and undeveloped, digestion is accomplished chiefly in the intestine. Cow's milk is the best substitute for breast milk, but contains too much proteid and

must be modified to suit the age of the infant. Country doctors must resort to prepared foods on account of lack of facilities for keeping cow's milk. Condensed milk with cream is a good substitute. No solid food allowed under 9 months. In discussion J. O. Carson said that as one-half the people in the world died under five years of age, a symposium on enterocolitis and infant feeding should be given each year.

J. H. Blackburn gave the classification of enterocolitis with a description of each kind.

W. R. Briggs reported a case of interocolitis in a child 18 months old in which he used silver nitrate and bismuth with good results.

D. B. Stone said that as cow's milk was richer in casein and lacked sugar he modified the milk according to Holt. Cleanliness was a great virtue in infant feeding. For enterocolitis he gave magnesia sulphate, followed several hours later by Dover's Powder. For treatment of enterocolitis, J. H. Souther strongly recommended small doses of calomel, then Dover's Powders.

J. O. Carson and J. H. Blackburn gave account of the sessions of the A. M. A. at Atlantic City, and the clinics and hospitals in Philadelphia.

At the close of the discussion Dr. Bateson spoke of the value of medical organization in promoting good fellowship, blotting out the strife and envy that has existed so long in the profession. He mentioned the great good the post graduate work was doing all over the country and one of our members, J. H. Blackburn was chosen by the American Medical Association to outline a course to be used by all the counties in America, on the chautauqua plan. On the good work and interest taken in this line of study the association will award a diploma at the end of the four years' course. A motion was made to discontinue the weekly meetings until Dr. Blackburn had formulated the program, which will be published in September; motion carried.

The society adjourned to meet July 10.

LILLIAN SOUTH, Secretary.

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GYNECOLOGY
FRED L. KOONTZ

EYE, EAR, NOSE AND THROAT
ADOLPH O. PFINGST

PHARMACOLOGY AND APPLIED THERAPEUTICS
V. E. SIMPSON AND T. C. HOLLOWAY

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THE A. M. A. POST GRADUATE COURSE FOR COUNTY SOCIETIES.

Although it attracted no great attention at the time from most members, probably no action taken at the Atlantic City meeting, or in fact since the re-organization, is likely to have a more far-reaching influence upon the future of the profession of this country than the ample provision which was made for a practical, systematic post-graduate course which can be easily adapted to the conditions and needs of any county society.

After the new organization movement was well under way, three or four years ago, finding it would be difficult or impossible to keep up the interest in their county societies under the old order of programs, often consisting largely of text-book papers and routine discussions, thoughtful men in widely separated sections, acting quite independently of each other, devised more or less complete plans for systematic instruction in their respective societies, usually involving weekly or bi-weekly meetings. Proving generally satisfactory, and being actively urged by the Committee on Organization, the plan spread rapidly and is now in operation in one or more counties in many states, including fourteen more or less complete ones in Kentucky.

Believing that there are almost unlimited possibilities in this scheme, and as a means of inducing both young and old members to continue or revive their interest in scientific medicine, and thus making each society, as time goes on, a real factor in the growth and development of the profession of the county, and feeling sure that there are few physicians anywhere, even among medical teachers, who would not be benefited by such a course, the Committee on

Organization recommended, and the House of Delegates provided for, the inauguration of such a course for the entire country. Dr. J. H. Blackburn, of Bowling Green, who has taken a leading part in the excellent and successful course of the Warren County Society, has been selected to conduct it. This is another honor from the Association of which the Kentucky profession may well be proud, and those of us who know Dr. Blackburn best feel sure that he will prove equal to the important task set before him.

The preliminary draft of the plan has already been printed and sent out to carefully selected county society workers in every section of the country for criticisms and suggestions. After taking advantage of these criticisms, it is expected that an outline of the entire four years, in pamphlet form, can soon be placed in the hands of all county societies which may be interested in it. It is then expected that the course will be elaborated in advance each week for the A. M. A., and other weekly journals, and four weeks in advance for the state and other monthly journals, modified, but somewhat after plan of the Inter-National Sunday School Lesson. After the course is well under way it is probable that each county society operating under the plan will be asked to appoint an examination committee, the examinations to be conducted at home under an implied or actual pledge not to seek text-book or other aids, upon blank forms furnished by the Association, and that a handsome certificate or diploma will be issued by the Association, all free of expense, to all members who take the course to the satisfaction of their county society.

Dr. Blackburn has taken the Warren County Society as his model, and it should be understood that the course is being designed to meet conditions existing in the av-

erage small county rather than for the cities. In some large counties containing two or more towns it may be more convenient to have weekly classes at each of the several towns for the convenience of the members in or near them. None of these difficulties exist anywhere which have not their counterpart, and which are not being successfully met in Warren County, just as they can be anywhere if the profession can be aroused to the necessity for doing it.

While it is hoped in the course of time to make this course so attractive that a majority of the county societies in every state will be engaged in the same line of study every week, it is well to bear in mind that it is purely voluntary and suggestive. A course will also be outlined for those societies which at present can only meet once a month, but the weekly course will be more fully elaborated, and will be urged as the method to be worked for in every county. Stimulated by the course now proposed, it is hoped and expected that many societies, especially in the educational centers, will suggest something far better, and that out of them all may be evolved something so nearly ideal that, by the second year, or at least by the second cycle, it can be utilized in any community where even as many as three or four live members can be gotten together each week, or as a course of home study for those less fortunately located. Let us all join hands in this work and have Kentucky lead in this as she has in all of the past in nearly every phase of medical development. Dr. Blackburn will be glad to correspond with any county society which may desire more detailed information in regard to the course.

MORE ABOUT THE WORK OF THE COUNCIL ON MEDICAL EDUCATION.

No other agency of the many employed by the American Medical Association is doing more in a broad and unselfish way for the welfare, not only of the profession, but of the people of this country, than the Council on Medical Education. The members were selected with great care and judgment. All of them have had large experience as teachers. They represent widely separated sections and almost every variety of the best school interests. A permanent bureau has been established in the Journal Building and every facility of the organization is being utilized in collecting, collating and giving publicity to the facts in regard to every medical college in the United States.

Within the past three years a member of the Council has made a personal investigation of each of the 160 schools, of every system of practice, and each of them has been graded very much as an individual would be in taking a civil service examination, and names of schools with grade attached have been published by states without fear or favor. The investigation involved the facilities of the school for teaching modern medicine, the character of the actual work done, and the practical results of the teaching as shown by the success or failure of the graduates who come before the various state boards for examination. A summary of the report presented is as follows:

The situation of medical education in the United States may be given as follows:

(a) A three years' careful study has been made by the Council on Medical Education of the American Medical Association of the conditions surrounding medical education in the United States. This study included the inspection of all the schools in the United States by one or more members of the Council.

(b) The great advance in the sciences in recent years has created the necessity for a much broader and more thorough education, both preliminary and medical, for the physician equipped to practice modern medicine.

(c) The standards of the medical schools in the United States are very uneven, representing the highest and the lowest types as compared with the standards of England, France and Germany. As a whole, the standard in this country is unsatisfactory and much lower than in those countries.

(d) A modern medical education demands, 1, a four-year high school education; 2, a year of physics, chemistry and biology; 3, two years in well-equipped laboratories of anatomy, physiology, pathology and pharmacology; 4, two years in clinical work in dispensaries and hospitals; 5, a year as interne in a hospital.

(e) The expense for the equipment and maintenance of the modern medical school is greater than can be met by fees paid by medical students. Medical schools, therefore, need endowments in order to meet the demands of present day medicine.

(f) In the United States, until recent years, medical education was most-

ly in the hands of medical colleges conducted as private institutions, while in Europe it is controlled by the universities. Within recent years, however, some of the medical colleges in this country have secured university connection.

(g) There are still, however, a large number of schools which are conducted solely for profit, and profit is only possible where the college fails to provide proper facilities for laboratory and clinical training.

(h) There are 160 medical schools in the United States alone, as many or more than there are in all the countries of Europe combined. Of the 160 medical schools in the United States only about 50 per cent. are sufficiently equipped to teach modern medicine, 30 per cent are doing poor work and need to make great improvements, while about 20 per cent, are unworthy of recognition.

(i) If the public realized the enormous difference that exist between well-trained modern medical service and ignorant inefficient medical service they would soon demand and obtain the needed reforms.

(j) A state without the protection of good medical laws, well enforced, becomes the dumping ground of the low-grade medical school with its output of illy-prepared medical men.

(k) To secure better conditions requires two things: Endowments for medical schools and better legislation providing state control of medical practice and license.

(l) This country should not be satisfied with medical standards unless they are at least equal to those of other world powers which are our competitors in commerce, arts and science.

The full report gives the facts and figures, and the exact status of all the colleges, by states, in alphabetical order. The entire work has been done in the most impartial and painstaking way, and as the conclusions as to each school are supported by the kind of testimony which will not be controverted, it is probably only a question of time until the standard fixed by the Council will be accepted as the basis for the recognition of schools by the examining boards of all the states. As about 50 per cent. of the schools are at present on the wrong side of the ledger, the report is of especial importance to all medical students and their friends. This vast work has been done ab-

solutely without compensation, except as to the secretary, and the Council is entitled to the gratitude of every member and well wisher of the profession.

FINAL ACTION BY THE A. M. A. ON THE INSURANCE QUESTION.

The action of the House of Delegates at Atlantic City on the insurance question was final so far as the American Medical Association is concerned. The report of the Committee on Insurance was a very strong and able one. Giving the names of the leading companies which have always adhered to, or which have restored, the full five dollars fee for examinations, the report recites in detail the protracted efforts made, and the failure, to secure similar action by the New York Life, Mutual and Equitable, the first named company leading the opposition to the profession always. The report fully exposes the fallacy of the claim of these companies that the reduction of fees was necessary on account of the recent legislation in New York, and points out that the Manhattan, one of the safest and best of the companies of that State, and which has never been involved in any charges of mismanagement, finds no difficulty in paying the full fee under the same law. The report also makes it plain that while "These companies insist that they be left to deal with individual physicians and not with the profession as a whole" that "they themselves have practically agreed to stand together in maintaining the reduced, insufficient and, we believe, unjust fee, and that these companies can and should continue to pay a minimum fee of five dollars for examinations." The report was adopted unanimously, and, in accordance with the recommendation of the Committee "the whole matter was referred to the state and county societies for such action as they may deem wise and proper. It was again urged, however, that the will of the majority be not made a test of membership, or professional recognition, kindness and moral suasion to be relied upon instead.

The Committee was discharged from further consideration of the subject, for the distinct purpose of showing the insurance people and all others interested that no further propositions will be considered, that the position of the Association has been assumed after mature deliberation and that the action was final. A large per cent of the county societies, nearly all of them in some states, already have the matter fully in hand. In some counties the organization is not sufficiently complete for effective action,

but in a large majority of them only good leadership and the same united action essential for every other phase of our work is necessary to give us ultimate victory in this matter everywhere.

SCIENTIFIC EDITORIALS.

H.-M.-C.—“A RAPID FIRE GUN OF MODERN THERAPEUTICS.”

In these “reconstruction days” through which we are passing it must become apparent to the thoughtful observer and student of modern therapeutics that, perhaps more than ever before, there is need for careful discriminating judgment in the selection of therapeutic agents.

The intelligent, progressive physician desires to give his patients the benefit of all that is known to be good, however new. He owes it to himself and those dependent upon him for medical advice to keep abreast of the times; to know what the best men in the great world of medicine are doing and to appreciate and use the results of their labors. But it is equally important that he should know how to guard his patients as well as himself from the new dangers that may lurk among these new things; that he should be able to separate the wheat from the chaff.

In seeking a solution of this difficult problem, it is well to keep in mind certain fundamental principles in reference to the use of potent drugs:

1. The proper and lawful use of any drug, or combination of drugs, capable of producing harm, implies accurate knowledge on the part of the physician, as to its nature, composition and physiological action.

2. Such knowledge must be based either upon competent and trustworthy authority or upon original investigation and experiment.

3. Without the advantages of large clinical experience and the study and observation of a series of cases, with complete clinical charts and laboratory tests, it is practically impossible for the average physician to base any safe conclusion as to new drugs in his private practice.

In view of these facts it becomes important to consider what constitutes “competent and trustworthy authority” for the use of preparations not recognized by the accepted standards.

We have heard much during the past year concerning patent medicines and proprietaries and certainly the revelations and exposures which have already been made, fully justify the attention which the subject has

received.

It is with no little humiliation and chagrin that we begin to realize, as doctors, “what fools we mortals be.” We are at last awaking to the sad, but important truth that we cannot always safely rely upon the manufacturers as our teachers and our guides in pharmacology and therapeutics.

By way of illustration the following notes of a recent discussion which took place before the Kentucky Valley Medical Association are submitted.

Upon the printed program for the 24th semi-annual meeting of this association held at Torrent, Ky., June 27, and 28, 1907, there appeared the following, “Hyoscine-Morphine-Cactin Anesthesia.”

Dr. W. F. Waugh, Chicago, Ill.”

Those not informed might naturally suppose that this society was to be honored by the presence of a distinguished member of the profession from the great city of Chicago who would contribute a scientific paper on this important subject. Those who attended the meeting were not disappointed, but found they were doubly honored in having not only Dr. Waugh, but Dr. W. C. Abbott, also of Chicago, present. The first business of the association therefore, after an opening prayer by Dr. Abbott, was to elect these two distinguished visitors to honorary membership. They accepted the courtesy and took part in the discussion of papers preceding that of Dr. Waugh on the program.

Finally when this was reached Dr. Waugh, arose and delivered a fifteen minutes’ talk, without reference to notes on the subject of the “H.-M.-C.” tablet as made and sold by the Abbott Alkaloidal Company.

While not attempting to quote *verbatim*, he said in substance, that this particular product, according to all reports received by the company had given truly remarkable, and without exception, favorable results. He explained that Cactin was a “concentration” of the active principles of *Cactus grandifloras*, and was found to be an excellent home tonic.

He commented upon the strange fact, observed in the use of this particular combination, that the tablet as made by this company produced an effect out of all proportions to that which would be expected from the use of the constituent elements singly. He illustrated this point by saying that if the effect of the morphine alone were represented by 10 and that of the hyoscine alone by 20, that the effect of the combination in this tablet was not 30, but more nearly 60 or 80, or 100. He referred quite briefly to its use in surgery, of which he said that he knew very little, but that more than one million tablets

had been distributed and that it was a notable fact that even when used most recklessly by inexperienced operators no untoward effects had been observed.

He referred to the success with which ether is used by the Mayos as being quite exceptional and argued that since the average surgeon cannot hope to be so fortunate in the use of ether, this new anesthetic filled a long-felt want, because it was absolutely safe. He dwelt at length upon its wonderful value in obstetrics. By the use of this tablet, and that with perfect safety to both mother and child the lying-in chamber was robbed of its terrors, and the pain of childbirth was relegated to the past. So true was this said to be that in some communities this tablet is already markedly affecting the birth-rate.

He referred particularly to the remarkable effects of this tablet when used in the treatment of those addicted to the morphine habit, a speedy cure being the usual result. Its use in delirium tremens had been attended with no less wonderful benefit.

He told of an enthusiastic physician in California who had experimentally used this tablet to reduce his own respiration to 4 per minute, then to 2 per minute, then to 1 per minute, allowing 20 seconds for inspiration, 20 seconds for expiration, and 20 seconds for rest, and then upon stopping its administration he regained his normal condition within 10 minutes.

Another incident related by Dr. Waugh was to the effect that this tablet had been given to a man who was thought to be dying, for the sole purpose of making his last hours on earth more comfortable. But to the surprise of the attending physician, the man promptly rallied and was soon in a condition of comparative safety.

In conclusion Dr. Waugh modestly stated that he had refrained from referring to the most enthusiastic of the reports that had been received from all parts of the country—that the half had not been told concerning his wonderful new anesthetic.

The discussion was opened by Dr. M. S. Brown, of Winchester, Ky., who briefly stated that the soothing words of the essayist had produced a strange semi-consciousness which rendered him scarcely able to decide whether he was asleep or awake, but he recovered sufficiently to remember that the only case he had ever heard of where this tablet was used, had resulted fatally.

The writer was then called upon to discuss Dr. Waugh's paper. Having found my name on the program in this connection, a week before the meeting, some effort had been made to secure from reliable sources, infor-

mation concerning this tablet and its makers and vendors,—the Abbott Alkaloidal Co. It is with the purpose of submitting to the consideration of the doctors of Kentucky the results of this investigation, rather than any opinion of my own, that the following abstract of my remarks on Dr. Waugh's paper, is presented here: "In a spirit of utmost good fellowship I have come up to this meeting of the Kentucky Valley Medical Society not only to profit by its deliberations, but to enjoy the personal and friendly association of my fellow workers. It is therefore with some regret that I find placed upon me the unpleasant duty of saying some things in the discussion of this paper which may seem to be discourteous to a guest and disagreeable to many of you. You must pardon me, however, if on the floor of this scientific body I endeavor to speak only that which in my heart I believe to be the truth, and that without prejudice or personal feeling.

I wish to assure Dr. Waugh in the beginning, that it is my practice as often as it is my privilege, to extend to detail men and to representatives of manufacturing concerns generally a cordial welcome and a respectful audience whenever they visit my office, and as an exponent of the "square deal" he will certainly accord me the further privilege of speaking quite frankly my own opinion of the wares which are thus offered for sale and of the manufacturing concerns presenting them.

I think that I am guilty of no discourtesy or injustice in assuming that 'Dr. Wm. Waugh, of Chicago' is not speaking to us today as a member of our most noble profession, which I am constrained to believe he was in many respects well qualified to adorn, but as the paid representative of the Abbott Alkaloidal Co., of Ravenswood Station, Manufacturers of Alkaloidal granules 'Tablets and Synergistic specialties,' editors and publishers of a medical journal devoted to the exploiting of the same, and just now engaged in "sharing with the doctors" the enormous profits accruing from this combination, at twenty dollars per share.

Having heard Dr. Waugh about two years ago in the same capacity before this Society, it is needless to say that I congratulate the Abbott Alkaloidal Company upon being able to control his distinguished services. However, as I understood him at that time to say

that he was going from the Atlantic to the Pacific preaching and teaching these new and wonderful principles of "Alkalometry" and not thinking that we are any worse off here than in other parts of this benighted country, it occurs to me to wonder how he has arranged to get back to us so soon.

At the proper time and place, I should as a member of this society, be inclined to question the propriety of placing upon our scientific program the name of any such manufacturer's agent, and if so it would be in accord with a "square deal" for us as doctors to hear from the others. As I feel sure that Wyeth and P. D. & Co., and Fairchild Bros., might—and I know all the St. Louis Chemical companies would be glad to send us a man.

However, with apologies to the Program Committee, if apology is due—let us try the case at bar.

My present predicament is very much like a youthful experience which I well recall. Having been reared by a strict Presbyterian mother who believed in the verbal inspiration of the Bible I was once so foolish as to engage in an argument touching some fundamental principle of Christianity with a fellow who did not believe in the Shorter Catechism or the Confession of Faith, in the divinity of Christ, or in the Bible itself. I couldn't prove anything to him, he had no respect whatever for my authorities. The contempt of this company and its representatives for the pharmacopeia, the National Formulary, and particularly for the Council on Pharmacy and Chemistry of the American Medical Association leaves us without any common ground upon which to meet.

As for the whole question of this "H. M. C." Anesthesia which is only Abbott's commercialized modification of an idea which ago. The following facts seem to be satisfactorily proven by witnesses whom I would adjudge competent and trustworthy:—

1. This tablet can be procured only from the Abbott Alkaloidal Company. It is therefore a proprietary and a nostrum. Beyond the statement of the manufacturer we have no means of knowing what it contains since nobody else knows what Cactin is. Only the Abbott Alkaloidal Company and the makers of Cactin pellets, and Dr. Emory Lanphear of St. Louis know anything about this remarkable heart tonic (800 adult doses of

which have been given to one small dog without apparent effect) and they won't tell. The drug is not recognized by any of our standards.

2. The Hyoscin-morphine part of the tablet is practically chemically and pharmacologically the same as the scopolamin-morphine combination suggested by Schneiderin in 1900, except that the dose has been increased, well beyond the danger line.

3. This method of producing anesthesia has long ago been weighed in the balance and found wanting; and claims of manufacturers to contrary notwithstanding, is neither satisfactory, rational, or safe.

4. There is no evidence to show that this company even with the invaluable assistance of one Dr. Emory Lanphear of St. Louis, can make or do things impossible to all the rest of the world. Dr. Lanphear is the most prolific and enthusiastic author I could find on this subject and it was a great disappointment to me to discover that he is a member of Dr. Abbott's Editorial Cabinet—the owner of no telling how many of those Twenty Dollar bonds.

No doubt the Lord could use such instrumentalities for discovering to a waiting world such a great boon as this would be; if he wanted to—but it is safe to say that up to the present time he never has.

Dr. Waugh has referred to the reports he has received from doctors. I wish now to submit a few of the replies received in answer to a letter which I sent to several doctors asking these questions, 1. What do you know of Dr. Waugh? 2. What do you know of the Abbott Alkaloidal Company? 3. What do you know of the "H. M. C." anesthesia?

Dr. C. S. N. Hallberg, Secretary of the Section on Pharmacology and Therapeutics, of the American Medical Association, also member of the Council on Pharmacy and Chemistry, writes under date of June 25, 1907, as follows:

"Dear Doctor:—Replying to your favor of the 22nd inst. just received to-day I beg to state:

1. While I do not set myself up as a judge of Dr. Waugh's ability, I know and so does everyone who might be in a position to know, that Dr. Waugh is intimately associated with Dr. Abbott in the manufacture and exploitation of medicines. These medicines while not objectionable per se are exploited in a manner anything but scientific.

The means of introducing their medicines to the physicians is based largely upon false premises as I have demonstrated in the Bulletin of the American Pharmaceutical Association for May and June, copies of which are sent you herewith. Their central idea is that no medicine is of any account unless it is an alkaloid or from their standpoint an active principle. This is therapeutically and pharmaceutically false but is found a convenient method by means of which the physicians who know little of the Pharmacopoeia and standard materia medica are easily beguiled.

2. The above reference covers also practically the question pertaining to the standing of the Abbott Alkaloidal Company.

3. While as far as I know the consensus of medical opinion is against the use of the Hyoscine-Morphine anesthesia, yet the fact remains that this company is exploiting a compound which cannot be of the composition claimed because so far cactin has not been isolated. It is true that Mr. Sultan of St. Louis claims to have discovered this principle, which was the subject of his thesis when he graduated at the Philadelphia College of Pharmacy some thirty years ago but its presence so far has not been confirmed by any one. Since it is not in the market it is assumed that it does not exist and therefore permits the query, "why is this cactin tacked on these two other well-known alkaloids, except to mystify the medical profession and compel such as desire to use this compound to get it from the Abbott Alkaloidal Co.?"

"I am surprised that the medical societies should tolerate men appearing before them simply to exploit proprietary medicines since this is the sole and only reason for Dr. Waugh's appearance before the Kentucky Valley Medical Society. It is a proprietary preparation and a *nostrum* because no one else makes it. If you doubt this make inquiry from any regular established manufacturing pharmacist or chemist whether they are in a position to make this particular compound."

Dr. Charles H. Mayo, Rochester, Minn., June 25, 1907.

"We have had so little trouble with our anesthetics that we have not had much experience with the various fads in that line."

Dr. George Ben Johnson, Richmond, Va.

"I would not care to misjudge a professional brother, and I may do Dr. Waugh and the Abbott Alkaloidal Co., a great injustice, but plainly speaking, I have held them under suspicion. In consequence I have not used their preparations, nor should I care to

do so. I have been very chary of hypodermic remedies for producing surgical anesthesia, and shall continue my cautious course until these various remedies get a well defined position in surgical practice."

Dr. Horatio C. Wood, Jr., Philadelphia, ex-Chairman Section on Pharmacology, A. M. A., writes me under date of June 25, 1907:

"As to my opinion of this method of producing anesthesia, I have read a great deal of literature published under the auspices of the Abbott Co., as well as other articles on the subject, both American and foreign, and see absolutely no reason to change my original conviction that the method is extremely dangerous, that it produces complete anesthesia in less than 50 per cent of the cases. Recent German articles have shown that as an obstetric anesthetic the method is dangerous to the child. The claim that Cactin overcomes the depressant action of hyoscine and morphine is ridiculous. In the first place there is no such substance as Cactin; that is, neither pharmacologists nor chemists recognize the name. There has never been definitely isolated from *cactus grandiflorus* any alkaloid or other active principle. Dr. Hatcher, of Cornell University, stated at the recent meeting of the American Medical Association, that in a number of experiments with proprietary preparations denominated cactine, he found them all absolutely inert. The claimed action of *cactus grandiflorus* is that of a heart stimulant, and as neither morphine nor hyoscine is a cardiac depressant it is evident its value in protecting against the dangers of the combination is nil."

Dr. Edward Ricketts, Cincinnati:

"I have not had any experience with the 'H-M-C' anesthesia. It is not in favor in Cincinnati."

Dr. I. S. Stone, Washington, D. C.:

"I am sure I want to have my poor patients recover as soon as they can and as safely as possible but I cannot get my consent just yet to do real surgery with the drugs you mention. I have never used this tablet."

Dr. Stirling Ruffin, Professor of Theory and Practice, George Washington University, Washington, D. C.:

"I have had no personal experience with Hyoscine-Morphine-Cactin Anesthesia. It may prove effective and safe but much investigation is yet necessary."

Dr. W. P. Carr, Washington, D. C.:

"I have not used nor seen used this method of anesthesia. The experience of others with Scopolamin-morphine, and with vari-

ous similar combinations, has not been sufficiently favorable to induce my trial of them. I have read some of Waugh's articles but he is not a man in whom I have any confidence."

Other letters were received but the extracts given are deemed sufficient.

Some of those to whom I applied for information hold positions of honor and responsibility in the American Medical Association, some of them are my former teachers, most of them are personally known to me as men of the highest standing in the profession, and are not financially interested in the manufacture or sale of drugs. Without exception all of these men from whom I have heard express an unfavorable opinion of the product in question and of the agencies and methods by which it is brought to the attention of the medical profession.

Dr. F. W. Owens, of Irvine, Ky., was then called upon to discuss Dr. Waugh's paper. He had not used the "H-M-C" tablet, but declined to accept the statement of Dr. Waugh to the effect that the particular combination of the well-known drugs, morphine and hyoscyne and the unknown quantity, cactin, could produce effects so out of proportion to the action of these drugs as ordinarily administered. He thought it in many cases both unnecessary and undesirable to use any anaesthetic in childbirth.

Dr. B. F. Van Meter, of Lexington, Ky., then gave a detailed account of the fatal case referred to by Dr. Brown, a full report of which he has furnished to the Journal of the American Medical Association. He stated that after autopsy the death certificate read as follows: "Cause of death: Failure of respiration, due to Hyoscyne-Morphine-Cactin Anesthetic as made by Abbott."

Dr. VanMeter contended that it was irrational, and unsafe to inject under the skin, a dose powerful enough to produce general surgical anaesthesia, of a drug so uncertain and unreliable in its action as hyoscyne is known to be.

Dr. W. B. McClure, Lexington, Ky., stated that he had not used the H-M-C tablet, that in view of the fact that this preparation had not been submitted to the Council on Pharmacy and Chemistry of the American Medical Association, he felt that he would not be justified in using it.

Dr. I. A. Shirley, Winchester, Ky., member of the State Board of Health, and Councillor for this district, then spoke as follows:

"Mr. President and Gentlemen:

"I have tried my best to keep my seat during this discussion but for the life of me can not do so. In fact under the circumstances, considering the positions of trust and honor that my brethren have bestowed upon me in elevating me to a place on the State Board of Health and electing me to the councillorship of this, the best district by far in this beloved State, to be quiet and thus give this matter a passive endorsement at least, would be to do violence to my conscience and your confidence. I think it is peculiarly unfortunate that this subject should come up at this time; if it had been first referred to the Council on Pharmacy and Chemistry of the American Medical Association and presented to us with their endorsement it would be altogether different. Does it not strike you as funny that the glorying results referred to are all or practically all, from persons directly interested financially in this particular manufacturing house? During the discussion of this question before the recent meeting of the A. M. A. in Atlantic City we are told that a distinguished gentleman stated that he had given many times the sized dose of cactin to a dog without in any way affecting the respiration or circulation. As cactin is said to be a heart stimulant and as the respirations are affected when the aforesaid tablet is administered, the morphia must be what does it, and we know how dangerous that is. As I understand it at least one of the ingredients of the tablet is of a doubtful nature and as it is manufactured by but one house or at least offered for sale by but one it is proprietary, and I can see but little difference between patent and proprietary medicines, against both of which the A. M. A. who is our guide in such matters, is conducting a vigorous warfare. One of the most ridiculous ideas presented by the essayist is that of recommending the remedy in emergency surgery. As this class of cases largely comprises my work (railroad surgery) it addresses itself to me with peculiar force. In as much as from one to three hours is required for it to have effect I can see no reason for waiting so long with a patient suffering with a fractured or crushed limb when but a few moments with chloroform or ether will be required. It is a pity the physician whom the essayist tells us voluntarily reduces his own respirations to five; two and one to the minute by its use and then recovered, had not gone one better and thus put himself entirely out of business for his fool-hardiness.

I don't think that any pharmaceutical house should be permitted to laud its wares publicly before this body, and especially one

whose preparations are opposed by the great majority of the members. The A. M. A. button that I notice on the lapel of the gentleman's coat which should be the insignia for honorable membership, is, I think, much out of place at present, in fact I think that while he is contending against the very things the association stands for, he disgraces the emblem and should lay it aside.

At this point Dr. Abbott was heard in his own defense. He gave us a fine exhibition of those qualities which have enabled him, in a few short years, to make of the Abbott Alkaloidal Co., a million dollar concern. He proved a skillful pleader, and having a bad cause he adroitly avoided the issue. He grew eloquent in praise of the great American Medical Association, and of the good work done by the Council on Pharmacy and Chemistry, every member of which, with a single exception (Dr. Hallberg) he claimed as personal friends.

He spoke feelingly, and at length, of his own meritorious labors, extending over many years, in the suppression and extermination of patent and proprietaries and all forms of nostrums and quackery and of many other things which were not under discussion. But he did not tell us what Cactin is, or how he determines its presence or on what authority or for what good reason he combines it with hyoscyne and morphine. He claims to prepare his own "concentration" by his own secret method from *cactus grandiflorus* gathered for him in Mexico, but admitted that he bought his hyoscyne from Merck. This is not all that he said by any means but it is all that I can remember now.

Dear old Dr. Waugh with an air of injured innocence gathered about him his cloak of offended dignity and closed the discussion. He solemnly and impressively repeated that Cactin is a "concentration" of *cactus grandiflorus*, and stated that this was all he knew about it. He saw no reason why anybody else could not make it. In regard to the other points raised in the discussion, he was *surprised*—but he had nothing to say. He had made two previous visits to this Society, but promised that this would be his last.

And so it was that in a spirit of sadness this session of the meeting came to an end.

From this fair and impartial statement of just what happened on the occasion referred to the reader will be allowed to draw his own conclusions; but when I read "Just let this sort o' sink into your soul: There's no dope for quackery made here" I shall quietly say to myself—"Quite true—They buy the

"dope" elsewhere—mostly from Merck—the thing they do make is money."

THOMAS C. HOLLOWAY.

GOITER.

By JNO. R. WATHEN, LOUISVILLE.

Chas. H. Mayo has recently written:

"The general impression to be obtained from a review of the surgical literature of America would be that diseases of the thyroid gland are greatly on the increase. This is probably not the case, but the public has learned that operations on goiter are not as fatal as were supposed from the results obtained when operations were made as a last resort on patients suffering from this disease and in a moribund state. The fact is that the mortality attending the operation (excluding cancer and advanced cases of exophthalmic goiter) compares very favorably with other major surgery; and, in the hands of those experienced, with much of the so-called minor surgery."

Mayo's mortality for all the varieties of goiter which presented at their clinic during the past seventeen years, was a little over 3 per cent. Over one-third of their cases were for exophthalmic goiter with a mortality of 9 deaths in 110 cases and in the last 64 of this number only two deaths.

Kocher reported at the last German Surgical Congress (1906) the results of his last series of 1000 thyroidectomies with a mortality of only 0.7 per cent. and in 3 of the 7 fatal cases the thyroid was the seat of malignant disease.

In the exophthalmic variety he lost one case in 52 thyroidectomies in his last series. Kocher has reported 175 operations for exophthalmic goiter.

The cause of deaths has been analyzed in 93 cases by Riverdin with respiratory conditions causing 43 deaths, hemorrhage 19, infection 13, shock and nerve injury 9, cardiac failure 6, with only 4 due to tetany and myxedema.

The diseases of the thyroid gland have usually been classified into hypertrophy, comprising the simple and the exophthalmic varieties; and tumors, again divided into cysts, adenoma, carcinoma and sarcoma. Some have made a further classification into functional derangements and inflammations, which latter are rare.

Bloodgood, after discussing the usual thyroid enlargements has lately written concerning the malignant variety:

"Every asymmetrical enlargement of the

thyroid in individuals over thirty years of age should be subjected to immediate operative removal. Only by following this rule will surgeons eradicate malignant tumors before they have given inoperable metastases."

He further says: "This knowledge of thyroid tumors should be widely circulated among the profession and the public. As compared with the breast, they are much more malignant."

Recently a great deal has been written upon the function of the thyroid and other ductless glands, especially the physiology as relates to exophthalmic goiter or Grave's disease, where there is supposed to be a hypersecretion, but much more remains to be learned and our knowledge is mostly confined to the theoretical.

Nevertheless certain surgical facts have presented themselves and lead us to a more careful consideration of our technique in operating upon this gland.

It is a well established fact that young adults whose entire thyroid has been removed retrograde in intelligence and older individuals may develop myxedema.

We further have noted that the complete removal, injury or cutting off of the blood supply to the parathyroids, when removing a goiter, frequently results in tetany; a condition characterized by painful tonic and symmetric spasm of the muscles of the extremities.

The parathyroids are four small glands resembling the suprarenals and are situated on either side, posterior and attached to the capsule which covers the tumor.

The two lower glands are in close relation to the inferior thyroid arteries and the upper close to the superior; therefore, care should be exercised in ligating these vessels as not to injure the parathyroids or to entirely cut off their blood supply.

Many years ago Graves and also Basedow described the disease which bears their names as exophthalmic goiter, a condition now generally recognized as one of hyperthyroidism.

While exophthalmic goiter has been a disease long recognized there exists at present much diversity of opinion as to the etiology, physiology, and pathology, and the only points we seem to have come to at least a partial if not universal agreement upon are the symptoms, diagnosis and treatment and fortunately the latter are the most essential from the standpoint of the patient and the physician.

Those symptoms which point to the earliest diagnosis are usually a tachy-cardia,

muscular tremors, a gastro-intestinal disturbance and general nervousness.

Excessive perspiration and often an occasional rise in temperature have been noted.

The exophthalmas and the enlargement of the thyroid gland are later manifestations of this disease.

Kocher claims never to have seen a true case of Graves' disease without an enlargement of the gland. Mayo says: "In our work at St. Mary's Hospital we have operated on exophthalmic goiters which were hardly palpable and have been surprised at the increased size of the gland over the normal when exposed. After all it is a question of increased secretion, absorption and delivery by the lymphatics, not necessarily the retention and development of a tumor."

While in the treatment of goiter the general, medicinal, dietetic, serum therapy and radiotherapy measures have yielded in a few selected cases brilliant but usually temporary results, on the whole they have been very disappointing and the real and permanent cures have only resulted from surgical methods.

With a perfected technique, due largely to the improvements in surgical progress and to a more careful study of the anatomy and the physiology of the thyroid gland, we are now able to operate with a greatly reduced mortality.

Without entering into a detailed description of the many and varied operations employed in the removal of goiters, the writer will briefly describe a technique which has yielded good results in his own work and which is a combination of many of the essential points suggested by the work of Kocher, Mayo, Crile and others.

A long transverse collar incision is made across the neck, this incision cutting through the skin and platysma muscle down to and completely exposing the tumor covered by the sternohyoid, the sternothyroid, the sternomastoid, and the omohyoid muscles. These muscles are retracted or what is better, often divided near their upper attachments so as to allow a good exposure of the tumor and also enable the operator to ligate the larger vessels with less difficulty.

The tumor is now freed by blunt dissection and the superior and the inferior thyroid arteries and veins are ligated close to the capsule and cut between double ligatures.

By ligating close to the capsule and as high up on the tumor as possible we avoid injury to the deep seated recurrent laryngeal nerve. The capsule is now opened and the mass enucleated.

We next clamp the isthmus and after re-

moval of the tumor ligate this *en masse* and cauterize with carbolic acid.

All divided muscles are sutured together and drainage with a large rubber tube is made through a stab wound just above the sternum and an inch or more below our transverse collar incision, which is carefully closed.

In exophthalmic cases the drainage should be as free as if we were dealing with a septic wound. The usual after treatment as of other similar wounds is instituted and the incision heals quite promptly.

URETHRO-PLASTY.

BY FRED L. KOONTZ, LOUISVILLE.

Urethral, like all other plastic surgery, looks good on paper; but the results are so often short of the ideal and so often out and out failures, that this class of work is particularly discouraging. Before we can have any measure of success in this work it is absolutely essential that the principles be well understood and the technique well in hand. This is not all—we must have the proper instruments; a shortsightedness, in even the matter of needles, may bring failure when you provide everything else and are masters of principles and technique. Here, more than anywhere else, is it the little things that are of extreme importance. Two needles I have found indispensable are a fine, short, full-curved cutting with relatively large eye, and a cambric, non-cutting, not to exceed one inch in length.

Here I insist on having ready a large assortment of instruments. I know it is considered the mark of the beginner by some, but I consider it a happy faculty to not care a rap what other people think about your procedure so long as you THINK you are right. We can never know, especially in this work, just what we may need. Here we have the surgical field of the Fine Arts where penstrokes count for more than brushes and success or failure may even hang upon the choice of a needle.

After determining accurately the existing condition, it becomes necessary to consider our plastic stock: this will determine our procedure along one of three lines—First, apposition of existing surfaces; second, replacing ruptured tissue, and third, creating new surfaces for apposition.

APPPOSITION OF EXISTING SURFACES.

This may be accomplished by utilizing the walls of a normal structure such as the mucosa, with its sub-mucosa, of the vagina. Here denudation areas are made on either side and these surfaces are brought together

with sutures. This is the simplest of all forms of urethro-plasty, and, where it can be accomplished, is the operation of choice.

REPLACING RUPTURED TISSUE.

It is sometimes possible to take advantage of the edges that are left as the result of the retraction of ruptured urethral walls and by denuding their summit, they may be brought together by interrupted sutures, passing through the base of each lateral edge. It is necessary in all cases where this procedure is adopted to isolate well the remains of the former structure, and an attempt must be made to restore these parts to the normal. This will necessitate both a thorough knowledge of the normal anatomy and an appreciation of the relation existing between that normal structure and the present condition.

HOW IS YOUR GRAFT TO BE NOURISHED?

This becomes necessary when our plastic stock is inadequate to the need. We have then the problem of bridging spaces. This may be accomplished in three ways: First, transplantation of adult tissue; second, creating new tissue; third, transplantation of new-formed tissue.

CREATING NEW TISSUE.

It is possible to introduce silver wire sutures or a silver filigree which acts as a framework to support the delicate granulation tissue. Tissue will grow upon weaving in and out the meshes, firmly imbedding the silver and making a firm wall. This is an example of the way in which new surfaces may be created. It is possible, further, for new tissue to be created at the posterior rupture of the urethra. The irritation of the constant discharge over the raw surfaces produces an excessive repair, the result of overstimulation, so that an irregular mass of new-formed tissue may result out of which it is possible to get plastic material. Such a condition was found in the case I reported.

We may boil down the philosophy of Urethro-plasty into three general questions: (1) where to get the tissue; (2) how it is to be nourished; (3) what elements tend to de-vitalize the new tissue.

WHERE TO GET THE TISSUE.

From the nearest possible source of proper tissue. This does not always mean contiguous tissue. In the case I have just reported, nature very kindly answered the question for me. The vaginal mucosa is the supply most often drawn from: it should always include sub-mucosa, either *en masse* or, where practicable, in two layers.

HOW IS OUR GRAFT TO BE NOURISHED?

There are two sources of blood supply available—one primary, and the other second-

diary, where possible is best to utilize both, as I did in this case. The primary is from a previously established source of supply, the principle of the mass graft. The secondary is dependent upon the establishment of a new source of supply, as we find in totally transplanted parts. It is a well known fact that two opposing surfaces in a healthy granulated, or fresh, condition will establish a relation in a remarkably short length of time, provided there is no mechanical interference such as interposed clots of blood. If the tissue can be left with a base of supply, even though temporary, it may serve to bridge over a dangerous period of famine. It is essential to know that the more highly specialized the tissue the less tissue resistance there is. It is a significant fact that nature has one repair material with which she patches all breaks, this is connective tissue, the least specialized tissue in the body and therefore the most resistant. We find her repairing a fractured bone, a divided nerve, a ruptured blood vessel, and missing epidermis, and in all cases the lesions are patched up with the same material—connective tissue. We will profit, then, in plastic surgery, if we are careful to transplant this tissue wherever it is possible. I would call your attention to the fact that in my case the entire transplanted material was new-formed or connective tissue which may in a large measure account for my unhopd-for success.

WHAT ELEMENTS TEND TO DEVITALIZE THE NEW TISSUE?

Here is where the greatest trouble occurs. Ignore the little things I enumerate under this head and failure will be almost certain to follow. (a) Pressure; temporary or permanent. Forcep pressure is a frequent source of tissue death. We cannot wound a part without a reaction to the injury however slight the injury the reaction always accompanies proportionately. You may injure your graft slightly, seriously or fatally according to your carelessness and lack of appreciation. Hemorrhage should never be arrested from a graft by means of pressure other than gauze and yet it must be perfectly controlled before the surfaces are apposed.

(b) Tissues must never be stretched or pulled, they must FALL in place. The object of sutures is not to produce apposition, but to maintain it. Bearing this in mind and taking into account the ease with which you have brought tissues together, you will use the minimum number of sutures and give them just as little suture pressure as is compatible with perfect apposition.

(c) Nothing will devitalize your transplanted tissue as quickly or surely as antiseptics. If the chemical agent is powerful enough to strike down a microbe in the hey-day of health and happiness, what will it do for a bunch of cells that are struggling to overcome both injury and starvation? Asepsis and not antiseptics is the proper condition for success. It is often necessary to irrigate and it should be undertaken with two objects in view, viz: mechanical removal of debris and for a vaso-motor stimulant effect; your irrigating fluid should be either sterile water or saline at about a temperature of 100 to 105.

(d) The fourth element of devitalization in urethro-plasty is the alkalinity of the urine. This may seem a surprising statement and yet I have only to call attention to the irritating qualities of residual urine that is undergoing ammoniacal degeneration. An alkaline urine is pathological and not to be desired. I think it is a frequent mistake to alkalize the urine; what we want is a mild acidity. We should secure this by the ingestion of large quantities of pure or distilled water and, if the urine is alkaline, by the administration of substances that will maintain an acid re-action which we will reduce in acidity by bladder irrigations. A good recipe for maintaining acidity is the following:

Benzoic acid 3ss

Boric acid 3I.

Cinnamon water 3II.

Sig. Dessertspoonful every 3 hours.

Before beginning to operate it is advisable to irrigate the bladder with some colored solution, such as permanganate, in order to locate all possible leaks and to prevent error as to the bladder opening. It is important to explore the bladder in every case for stone. In order to collect enough urine for examination in these cases, keep the patient upon a bedpan until sufficient quantity collects.

I have purposely avoided entering into a discussion of the manifold varieties of urethro-plasty for every case is a law unto itself. I have tried to point out what seems to me to be the most important general considerations.

REPORT OF CASE.

Mrs. B. white, age thirty, married. Personal history good except for a difficult labor three years previous. Present condition good except for incontinence. No pelvic trouble whatever.

Special history: Was delivered three years ago with instruments. It was a difficult labor and a high forceps operation,

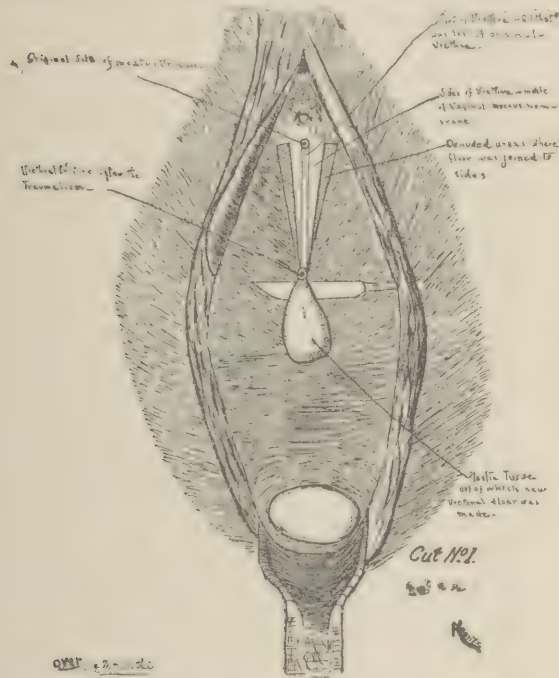
during which the urethra was torn open longitudinally throughout its entire length. This was followed by incontinence. When I first saw this woman she had been in this condition for three years. The opening into

the vagina and the urethra. Note the cellular tissue between these two structures.

Anatomy. The normal urethra is about one and a half inches in length. Its anterior extremity lies about 4-10 of an inch below the symphysis pubis. The wall of the urethra is about 1-5 of an inch thick and is capable of great distension since it contains a large amount of elastic tissue. The urethra is lined with stratified epithelium, the outer end closely resembling the vagina while the inner end is the same as the bladder. I want to call your attention to the fact that the external orifice is normally about four times larger than the internal orifice. This I have tried to reproduce as you will notice from the triangular denudation areas.

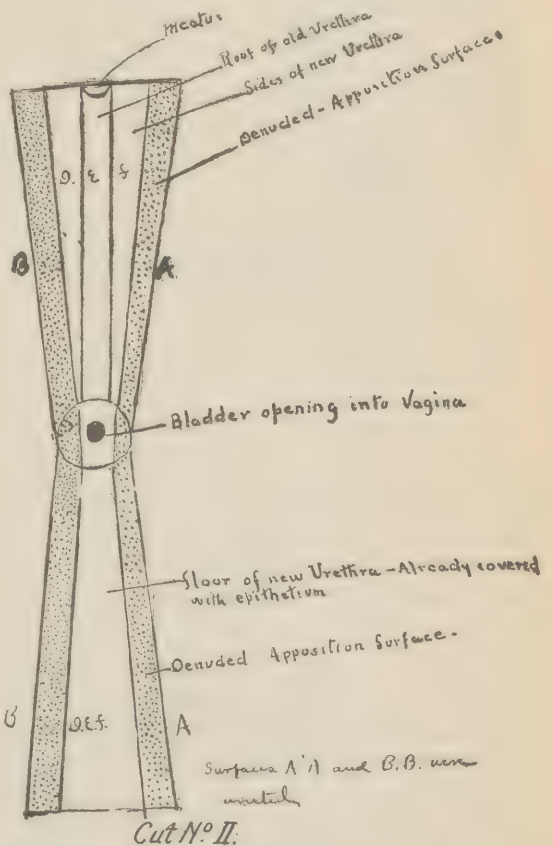
An explanation as to how this accident could have occurred:

The vagina is formed embryologically by



the bladder was about an inch and a quarter back from the external vaginal orifice. Whether there had been left some lacerated tissue at this point I was unable to say, but there was found upon examination a long tit-like process of tissue hanging from the new opening and extending down into the vagina for three quarters of an inch, over which the urine dripped constantly. This was in all probability made up of some of the original lacerated tissue upon which granulations had built until it had taken on the present form and size, after which it became organized and covered with epithelium. You could trace the roof of the old urethra by its glistening appearance. This case was referred to me by Dr. Cartledge, who was present and made some valuable suggestions at different stages of the extremely tedious operation.

My object was to build up an urethra and to have the new channel lined entirely with old epithelium. To show how this was best accomplished, I will refer to my drawings, where I think I can demonstrate it. Drawing No. iii shows the normal structures in their normal relation, in order to refresh your memory on the anatomy and to show also how this accident could have happened. This drawing represents the bladder greatly distended. It shows the proper relation of

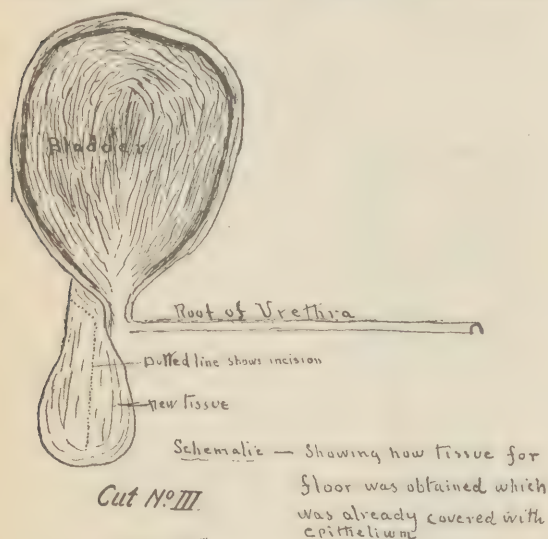


the fusion of the ducts of Müller after which an absorptive process removes the separable to suppose that nature sometimes carries this absorptive process beyond the normal limits. As this line of fusion is in the median line we would then have a thinning of the anterior wall in a line corresponding tum. Now as there is great variation in this absorptive process, sometimes leaving a more

or less complete septum, is it not reasonable to suppose that nature sometimes carries this absorptive process beyond the normal limits. As this line of fusion is in the median line we would then have a thinning of the anterior wall in a line corresponding exactly with the line of the urethra. I can readily see then how the extreme stretching of the anterior wall by forceps would cause it to separate and extend into the urethra. Especially if the bladder and urethra were distended and the urethra impinging upon the symphysis.

I wish to digress here for a moment to note a little historical data that is of interest.

Winkel in a monograph on "Diseases of the Female Urethra and Bladder" has pointed out that much of what is now known



of these diseases was known hundreds and thousands of years ago and has been rediscovered by late observers. The Cnidian school (about 400 years B. C.) possessed a fairly accurate knowledge of the diseases of the bladder, as did also the Indians 100 years B. C. Aetius (575 B. C.) described ulcerative affections of the bladder. Paul of Aeginae (670 A. D.) treated diseases of the bladder by irrigation through a catheter. Drawing No. II, shows the condition that existed in this woman. Note the location of the bladder opening and the contracted bladder. You will notice also the process of tissue hanging pendant from the opening. It was out of this that tissue for the floor of urethra was obtained.

OPERATION.

The projection of new tissue was split, the knife entering posteriorly, through about three-fourths of its length. This flap was then turned down and brought forward

when it was found to extend somewhat beyond the old orifice. It was then trimmed into the shape of a triangle attached to the new bladder opening by its apex. Two strips were denuded on either edge about three-sixteenths of an inch on its epithelial surface.

The old urethral roof was utilized and two triangular spaces were left on either side of it to form the sides of the new channel. Outside of these were denuded, two triangular spaces the same size and corresponding with the denuded spaces on the flap. The triangular flap was now brought up and the denuded surfaces apposed, thus giving a new canal whose interior was made up completely of epithelial surface. The apposed surfaces were united with 0 chromic gut by means of interrupted sutures, introduced with a short curved needle and very close together. A small soft rubber catheter was now placed through the new urethra and left in the bladder. The bladder was irrigated daily with plain sterilized water. She went home at the end of two weeks. At this time I removed the catheter permanently, which after the fifth day had been removed and cleaned daily. Good union had occurred with about 1-4 of an inch retraction of the flap in length. This was of no consequence however for she had gained complete control of the bladder. I saw this patient one month after operation and she reported that she was well and having no trouble whatever. It has now been one year and I am sorry that I have been unable to get a late report; inquiry within the last week having failed to locate her.

ORIGINAL ARTICLES.

MEDICAL MILK COMMISSIONS AND "CERTIFIED MILK."

By H. E. TULEY, LOUISVILLE.

At the time of the last meeting of the American Medical Association there was held a notable gathering in the parlors of the St. Charles Hotel in Atlantic City. Through the efforts of Otto P. Grier of Cincinnati and Henry L. Coit, of Newark, N. J., all of the physicians connected with Medical Milk Commissions were called together with the purpose of forming a National Association of Medical Milk Commissions.

Fourteen years ago, Dr. Coit, realizing the importance of obtaining a pure milk supply which could be used for clinical purposes, devised the plan of forming a commission of medical men, who with the assistance of properly equipped chemists and bac-

teriolgists and veterinarians would supervise the production and handling of the milk supply from a healthy herd, whose chemical constituent and bacteriological content should be a known quantity. Since that time Medical Milk Commissions have sprung up in twenty-five cities distributed from New York to San Francisco, and under these commissions a pure milk known as "Certified Milk" is produced.

It was an inspiring sight to see so many men interested in the same subject, sacrificing their time for the good of the community in which they live by studying and discussing plans whereby a purer milk supply could be obtained, especially for infants and invalids all over the land.

The American Association of Medical Milk Commissions was formerly organized with the election of Dr. Coit as president, and Otto P. Geier as secretary. Important committees were appointed for the purpose of standardizing the methods of procedure in the work of the Commissions. The best methods of bacteriological count, the most approved and practical chemical tests, the form of contract to be drawn up between the commissions and the dairymen, and many other practical parts of the work.

Transactions of the meeting will be published and distributed to the members of each Commission and the next meeting will be held at Chicago the day preceding the meeting of the American Medical Association, in 1908.

A significant fact was brought out during the discussion that in almost every instance, the establishment of a "Certified" dairy had resulted in an improvement in the general milk supply of the city and the supply of "Certified" milk and cream had in no case been equal to the demand. It was brought out also that the Commission could produce two grades of milk, the only difference being in the method of delivery. The "Certified" milk in bottles bottled at the dairy and an "inspected milk" delivered to institutions in cans. The limit of the bacteriological content in inspected milk was placed at one hundred thousand per C. C. and of certified milk at ten thousand. It is to be hoped that the profession in general will become interested in this movement for the betterment of the milk supply of their communities and a commission appointed by their County Med-

ical Society for the purpose of producing "Certified" and "inspected" milk.

ADDRESS OF WELCOME.

BY DR. J. R. CARROLL.

Mr. President, and Gentlemen of the Kentucky Valley Medical Association:

I am grateful for the honor, as well as the pleasure, of greeting you, one and all, at this noted mountain resort for this, the twenty-fourth semi-annual meeting of the Association.

A happy thought that in unity there is strength. In our discussions and associations together here, we are all benefited, and through us humanity is bettered by reason of this Association. It is here we should report, in the true spirit of fraternity, each one, his failures and triumphs. We should not while here be ashamed to acknowledge a weakness, nor too modest in the display of some superior ability. We should all expect both to help and to be helped, to give and to receive, to direct and to be directed, to command and to be commanded. Let us spend a few pleasant hours together, here in the grandeur of mountain scenery, near to Nature's heart, as brothers with a common cause.

So, to you, gentlemen of the Bluegrass—a verdant pasture and roamed o'er by the famous thoroughbreds—we of the rugged hills—a garden of natural scenery—extend greetings and a hearty welcome. Perhaps, not with the same merriment and eloquence as heretofore, but with the same genuine hospitality as of old, mingled with a tinge of sadness; for the pale horse and his rider, the grim messenger of death, has invaded our ranks since our last meeting and summoned our esteemed President to his reward. And in fond memory and as a token of the esteem in which our deceased President was held by the profession, I pause, drop a tear of regret, and pass to the serious side of the doctor's life.

I say, and without fear of contradiction, that none of the duties of any the other professions are so exacting, precise and mandatory in their nature as are those that fall to

the lot of the physician. The minister at his leisure, in his pleasant study prepares his well rounded, eloquent sermons; the lawyer dictates his briefs in his office, his library before him to consult; while the physician, in a great many instances, must act on the spur of the moment. For instance, in case of an accident, a post partem hemorrhage, the asphyxiated infant, when a life is in his hands, a lack of decision, an error on his part, and a soul is launched into eternity. Then again, go along with him and face the biting snow or the pelting rain; swim the swollen streams or ride over frozen roads and ice, bravely facing all the elements of nature, not alone for the meager compensation which he receives, but with that humane principle to try to relieve suffering humanity. Maybe it's the fond husband or the dutiful wife or the prattling little infant, (the idol of the family) in the agonies of pain and disease, and to the educated eye and sensitive, trained touch of the physician the clammy perspiration, the unresponsive pupil, the feeble, flickering pulse, all are sure signs that death is fast approaching; and when he turns to the interested ones, who read his prognosis from his countenance, that he has exhausted all his resources to no avail—who's there to speak one word of encouragement to him upon the brave effort he has made to sustain a life. Nay, slowly, silently discouraged, he wends his way to his abode, his labors not always unavailing, yet he is a disappointment to his fellow man because his powers to heal are not unrestricted.

Now, gentlemen, again we welcome you. The keys to our little resort are in your hands. With open doors and large hearts we welcome you, and when the hour arrives for your departure, may one and all be glad for that day of rest at the little mountain resort, and feel that the time was well spent, and then may you return to your work benefited and encouraged, a united brotherhood.

COMPOUND FRACTURE OF THE LEG.*

By J. V. PREWITT, WEST POINT.

Compound fracture is one among the most common injuries the railway surgeon is called upon to attend. It is here where modern treatment has obtained most gratifying results when compared with that of the old method of treatment. The modern treatment was given its birth upon the introduction of Lister's Antiseptic Surgery, and a proper knowledge of immobilization of such fractures. The treatment that I have employed in dealing with such injuries are shown in reporting briefly the following cases with treatment:

Case No. 1. "James L., age 52 white laborer thrown off of hand-car, while same was in motion, sustaining compound fracture of right leg in lower middle third. On examination, I found both bones broken, the opening over the seat of fracture sufficient to admit the end of my little finger, limb shaved, and scrubbed and thoroughly disinfected. I closed the open wound with fine cat gut, used slight drainage, dressed and placed in temporary splint. On the tenth day the swelling had about subsided, no infection, union by first intention. I then put the leg up in a permanent dressing, using plaster paris. Thirty days later, dressing removed, result satisfactory.

Case No. 2. S. Mc., Bridge supervisor, on June 9th, 1905, while loading piling on a flat car, was struck with piling from behind, the end of the piling striking him below the knee producing a compound fracture of the leg at the junction of the middle and lower third, he also sustained a simple fracture of the right leg in about the same location. The wound over the seat of the compound fracture was enlarged and explored and several pieces of bone, small pieces of clothing, were removed. The main vascular supply was not seriously damaged, I was careful to control all hemorrhages. The wound was freely irrigated with a mild carbolized saline solution.

The ends of the upper and lower fragments of the tibia were approximated, and

* Read at the 1906 meeting of the Kentucky State Association of R. R. Surgeons at Richmond.

the wound closed except slight drainage was used. Temporary dressing was applied and patient removed to his home. On the second day wound was dressed and limb placed in fracture box. Patient was then turned over to his family doctor, the latter placed the limb in a permanent dressing. The doctor informed me two months later that the patient made a good recovery, that the compound fracture was far more satisfactory in result and also to the patient than the simple fracture of the other leg. I attribute this to the fact that the pressure from hemorrhage, and other conditions resulting in the simple fracture was prevented or removed in the compound fracture, many small pieces of loose bone were removed and better apposition obtained.

Case No. 3. Mrs. C., white, age 65 jumped from a moving passenger train last February sustaining compound fracture of the left leg, the tibia being broken about the middle of the lower third, the opening over the seat of the fracture of the soft parts was a small puncture wound produced by a sharp spicula of bone. Limb and wound sterilized, fracture reduced, there being no hemorrhage. The external wound irrigated with a 1-2000 solution of bichloride. Dressed and placed in temporary splints, on the 8th day, no infection and permanent dressing applied. The tenth day patient returned to her home, result seven weeks later satisfactory. I always include the ankle and knee joints in my dressings of plaster paris. I never apply a permanent dressing while the limb is swelling or subsiding. I delay permanent dressing in case I have reason to believe I may have infection.

Remember that your success and result often depends upon what is done in the first dressing, and insist upon absolute rest.

Do not hesitate to explore wounds of compound fracture when indicated, and make one exploration do if possible.

Be careful to remove that which would infect your wound, and more careful that you do not permit the introduction of something that may infect it.

In conclusion I would say that amputation of the leg should be the last thing considered in the light of modern surgery.

TREATMENT OF TYPHOID FEVER.*

BY J. PAUL KEITH, HOPKINSVILLE.

In the beginning I would say there is no specific in the treatment of typhoid fever, as is the case with all diseases with a very few exceptions. It is the man who at all times remembers his pathology and gives his attention to the details of his treatment, that is the successful physician in typhoid fever. But for purposes of study we will divide the treatment into prophylactic treatment, and treatment of the disease.

Under prophylaxis I would mention, First, Isolation of the patient. This should be done in so far as it is practical. In no case should other members of the family be allowed to sleep with the patient, or use the same drinking vessel, etc.

Second, Thorough disinfection of the stools and all excreta, either by having all stools and urine passed into a vessel containing a solution of carbolic acid 1-20, or chlorinated lime, in which they should stand for at least six hours before being emptied. In the country I have them immediately buried in a trench four feet deep, or have a slow continuous fire on some back lot and cremate them at once.

Third, The careful inspection of drinking water and food supply comes next in importance, and should receive our careful attention to find the source of infection if possible. This is of most importance to the city physician as regards the milk and food supply, and to the country physician as regards the water supply. All homes should be screened as a protection against the common house fly, as it has proven a very common carrier of the infection notably in the U. S. Army in 1898 in which it was found that the officers whose quarters were screened all escaped.

Fourth, Cleanliness of the surface of the patient. He should be bathed regularly, and all soiled clothing removed and placed in a receptacle of boiling water. The nurse should be careful to disinfect her hands each time after handling the patient.

* Read before the Christian County Medical Society June 17, 1907.

Fifth, Serum Inoculations, Prof. Wright, whom, perhaps, has given this more study than any other man, reports results from the British Army as follows:—Out of 11,000 men, 2,853 were treated and most of these were young and unseasoned. Of these only 27 or .95% contracted typhoid fever, and five died therefrom, of the uninoculated 213 or 2.5% contracted it and 23 died.

(1) The above serum was prepared from lysolized 4 weeks old cultures of a virulent typhoid bacillus, prepared 12 months previously, of which .5 to .7 c c, were used in each inoculation.

TREATMENT OF THE DISEASE.

Under the head of general treatment there are a few things which we should give our special attention. A room should be chosen that is well ventilated and as far removed from the kitchen and all unsavory odors as possible. The securing of a good nurse is of the utmost importance; but, any intelligent and willing person, can with a little teaching, and constant reminding make a good nurse. I believe two of the best I ever had were two girls of 18 and 20, who knew no remedies of their own and were willing to carry out my instructions in detail.

The importance of early treatment is well illustrated by Osler statistics of deaths in 229 cases; as follows:—9.5% died who were admitted in the first week, 6.2% of those admitted in the second week, 12% of those in third week, and 25% of those in fourth week. The patient should remain in a recumbent position. A bed pan and urinal should be used. The bed clothing and gown should be removed daily and disinfected as mentioned above. The patient should never be left alone, even if not delirious, and should be allowed to receive very little company.

Diet. There seems to be a difference of opinion among physicians as regards diet for typhoid patients. Some on the extreme saying never to feed patients more than milk and very thin soups exclusively and until ten days after the temperature has reached normal, others feed their patients through the entire course of the disease. Of course this is limited to soft boiled eggs, strained gruels, finely scraped or minced beef, beef, chicken, tomato, potato, and oyster soups, strained and thickened with rice, arrowroot, flour, milk, or cream. In my own practice as a rule, I limit them to milk of either kind; or very thin soups. Unless it is one of the cases which run a very low course of fever, then I add some of the lighter meat soups and soft boiled eggs, and have seen no bad effects from such practice. In cases where

temperature seems to hang on beyond a reasonable length of time, I have seen this quickly drop to normal on the addition of solid food, beginning with soft boiled eggs, butter and toast. Some give alcohol in small quantities throughout the course of the fever. This is to be condemned as a rule. But, in alcoholics it is good practice, also in old and debilitated persons after the headache has ceased and prostration begins.

Medical Treatment. In addition to the general rules laid down above, most cases are treated along one of four pretty clearly defined methods.

First, The expectant method, which consists in meeting symptoms as they arise and guiding the case safely through the disease. Perhaps this is the best method in cases of a mild type, but would hardly suffice in the severer forms.

Second, The antiseptic method which is based on the fact that the germs and toxins exist in the intestinal tract and are absorbed into the system, causing the serious nervous and muscular symptoms. Under this head I would mention bismuth, betanaphthol, salicylates, salol, boric acid, turpentine, sulpho-carbolates, and guaiacol, all of which have their advocates while many of the so-called authorities among them Wilson and the great Osler look upon intestinal antiseptics as useless. I can not see why, if we give a remedy which will not affect our patient and which will change the stools from a liquid ill smelling one, to one of normal character with little or no odor, that it should not be beneficial to the patient.

Third, Is the eliminative treatment, combined with the antiseptic method, which has been advocated by Bouchard in France and by many eminent men on this continent. According to above cited authority this consists of calomel gr. 1-2; guaiacol carb. gr. 2; podophyllin gr. 1-20, to 1-40 every two hours for 24 to 48 hours, according to condition of bowels and, continue until 4 or 5 intestinal evacuations occur for two successive days. Then the calomel is stopped and, menthol gr. 1-2 is added to the guaiacol and podophyllin, small doses of saline or Hunyadi are given if there is any tendency to constipation.

Fourth, The cold bath treatment which it is not necessary to describe as all present are familiar with same. It is probably the best treatment, where carried out in a well regulated hospital.

In my own practice I use the third method, with intestinal antiseptics and a modified bath treatment, as follows:—First a housecleaning of the intestinal tract with calomel

gr. 1-4 to effect, followed by intestinal antiseptics to effect, of which the sulphocarbolates and salol are my favorites; the purgative is repeated every two to four days up to second week, after the second week using an occasional dose of castor oil if necessary, to move the bowels; with an enema daily if bowels do not move. If the intestinal tract is kept clean by such treatment we have far less complications. Some advocate the use of carbolic acid, betanaphthol, etc. I think the principle is the same and take no issue with anyone for his preference for each will use that which serves him best. Some advocate the use of acetozone; claiming for it special therapeutic effect in typhoid fever. While I think it probable that we may some day find a remedy which will prove a true internal antiseptic; I seriously doubt if acetozone fills our need.

There are some special symptoms which require special treatment; headache in the beginning of the disease is best relieved by 3 to 5 gr. doses of phenacetin, better if practical by an ice pack to the head for 15 to 20 minutes at a time. Often a cool sponge will relieve same.

Sleeplessness is best relieved by trional or sulphonal early in the case, but, later opium in the form of Dover's powder, but on account of constipating effect should be used with discretion.

Dryness and cracking of the tongue with herpes labialis is best combatted by regular washing of the mouth and lips with a solution of boric acid and glycerine.

Vomiting is best treated by mustard poultice to epigastrium or an ice pack to the pneumogastric nerve, small doses of bismuth and cerium oxalate have proven beneficial.

Tympanites; if moderate, requires no other treatment other than that the general one laid down above; if excessive a reduction of diet with a turpentine stupe applied to the abdomen, and 3 drops of same three times daily, especially if tongue is dry brown and fissured. Just here I would say that some give turpentine as a routine treatment, to which I object as I have seen some very unpleasant effects from such practice. It should be given only when indicated, as above.

Constipation is best relieved by castor oil or saline enemas. Diarrhoea is mostly caused by hard irritating masses of retained feces; and is as a rule promptly relieved by a brisk purge, either calomel or oil—calomel up to end of second week, oil afterward.

High temperature is best combatted by frequent sponging. My rule is a sponge for 15 to 20 minutes every three hours if temperature is 102 or above, every two hours if

above 103, beginning with lukewarm water and gradually cooling to ice water.

In convalescence is where the individuality of the physician appears to the best or worst advantage. And the man who can humor or seem to humor the whims of his patient and still give him just what he needs is the really successful one.

Serum therapy. Frankel and Manchont (2) used a sterile liquid from the culture of typhoid bacilli in bouillon made from the thymus of the calf heated to 50°. The injections were made deeply into the muscles of the buttock. The first injection of 5 c.c. of the sterilized liquid was not followed by any reaction except in children. On the following day a second injection of 1 c.c. was made, which was followed in the majority of cases by rise of temperature and chilly sensations, after 6 or 7 hours the temperature fell, and rose again in those cases in which the treatment was discontinued. Frankel gave the injection every second day, increasing the dose by 1 c. c. each time. The temperature showed decided remissions, the constitutional symptoms were less marked and complete absence of fever resulted in the course of a few days. Fifty-seven cases were treated in this way.

From the above reports we see the results are satisfactory, both as to prophylactic and curative inoculations; also we see the difficulties to be overcome, i.e., as to size of dose and time to be repeated, this at the present being only in the empirical state.

With the perfection of the method of obtaining the opsonic index this difficulty will be removed. Great strides have been made in this direction since these reports. Also one investigator has described a peculiar body which appears in the blood of the typhoid subject several days before any of the common symptoms appear whereby we are able to diagnose a case of typhoid fever. This being true may we not hope at an early date to reach that long coveted goal of the medical profession, namely; to prevent typhoid fever by the inoculation of the serum in all those cases diagnosed by the above plan. And to be able to abort all other cases by curative inoculations as indicated by the opsonic index. Of course this is all in the future, but seemingly only awaits the perfection of methods for even those in small towns to be able to use same. But for the present we necessarily must depend on our old and tried friends, eliminants, antiseptics, and hydrotherapy.

I have not spoken of complications purposely as they do not come in the scope of this paper.

In conclusion I will repeat that we must at all times remember our pathology, as in its different stages typhoid fever requires different treatment. And in no disease is a man's therapeutic skill more on trial or his judgment so much put to the test. I know there are those present who will differ from me on this treatment, but if I have provoked a free discussion of the subject, this paper will have fulfilled its mission.

1. MacLauthlin Med. News Mar. 2, 1901.
2. Amer. System Med. Vol. 11, page 2229.

MY MODE OF MANAGING A NORMAL CASE OF LABOR.*

By HUGH D. RODMAN, BARDSTOWN.

The head lines or title of this paper and the frequent use of the personal pronouns, I and my, in it would indicate that there is some egotism in its writer. But such is not the case. The whole object of its author is to elicit discussion, and learn if some other member has a better or a safer mode of managing his case than I have of managing mine, if so, I and my patrons will be benefited by adopting his mode of procedure.

When I am called to attend a woman in labor, I dress as neatly as possible, get my obstetric bag and hasten to her bedside. My obstetric bag contains the following articles, which are all for which I have ever found any need; one pair of long forceps and one pair of uterine forceps; six bottles containing Fld. Ext. Ergot, Tr. Opium, Spts. Ammonia Aromatica, Chloroform, Boracic Acid, and Bichloride tablets. A good grade of talcum powder; gauze, absorbant cotton; umbilical scissors and ligatures and clamp; towel, soap and nail brush; Kelly pad and clean white apron with long sleeves. On arriving at the bed-side, unless there is demand for immediate action, I usually take a seat and endeavor to make myself agreeable and at ease for a short time, all the while watching the patient to catch if possible the extent and severity of her pains. After a little pleasant chat I inquire quietly into her condition during the past few days, and her present condition as to bowels, kidneys, skin, circulation, nerve centres, etc. On receiving proper answers to all my questions, I inform her that it is necessary now to make a digital examination to be assured, before labor is too far advanced, that all is right with her, and that she is really in labor. I then call for a basin of clean warm water, and remove my coat, if the room is

not too cold, and wash my hands thoroughly and dry them. I then adjust my apron, which covers me from my collar almost to my feet, and anoint my hand with carbolyzed vaseline, which I forgot to mention that I had in my case, taking my seat at the bedside, at the same time talking pleasantly with the patient, or if it is a primipara explaining the nature and object of the examination, this is for the purpose of removing any dread from the mind of my suffering patient, and proceed to examine carefully, by touch only, the condition of all the pelvic organs as far as possible, determining the condition of the vagina, bladder, rectum, cervix and os uteri, and if possible at the same time determining the presentation. On removing my hand I explore the condition of the external genitals, including the anus, to note if there are hemorrhoids; this complete I announce the result of my findings to my patient. This is done to relieve her mind of fear of great trouble from abnormal conditions. As I am treating only of normal labors, of course I have found all things right, and so assure my patient. If from the condition I find things, and the pains are now normally strong and frequent, I make myself as comfortable and as pleasant as possible, answering at all times any inquiry the patient may make concerning her condition and how her labor is progressing. There are many little things which a physician can do, by word, act or expression which fasten a woman's confidence, and go a long way toward assuring her that she is in good hands, all of which render her suffering more bearable, and relieves her mind of that great anxiety which accompanies every labor, and I am a great believer in doing all in my power to lessen every suffering, whether it be mental or physical, during these critical periods in a woman's life. If her pains are infrequent, short and light, and her genitals are rigid, and I am too far from home to reach her quickly, I spend my waiting hours reading, I usually have something in my pocket to read, chatting with the assembled neighbors, or by snugly tucking myself away on some nearby bed or couch or across two chairs, if there are two for me, wrapped in my overcoat, and endeavor to get a little much needed sleep. If on the other hand her pains are frequent and strong, and her parts are dilated or dilatable, I take my seat at her bed-side, and there remain 'till all is over, and assist her in every way possible by giving her my left hand to support her during pain, and encouraging her by kind remarks and encouraging expressions, making frequent vaginal

* Read before the Nelson County Medical Society, December, 1906.

examinations to note the condition of her organs, the exact position of the child's head, and the amount of advance with each pain.

Before the amniotic sack ruptures, I inflate the rim of my Kelly pad, sponge it with a bi-chloride solution and apply it under her hips, after having had the bed and her clothing properly adjusted. I have often believed that these manipulations did great good in advancing an otherwise retarded labor. As the head advances and pressure on the perineum is great, I often introduce my finger into the rectum, which has previously been emptied, and make traction forwards, at the same time keeping the palm of my hand against the perineal space. I have also found my finger to do great good in the rectum in removing the head from its lodgment in the curve of the coccyx. I have found that my best and most effective means of support to the perineum, is by introducing two fingers into the rectum and drawing forward, and at the same time resting the palm against the perineum and pressing backwards with it, thereby relieving the tension, and at the same time slipping back off the head the binding perineum.

When the head is born, it is my rule to slide my right hand under the occiput, and at the same time running my fingers over the neck and as far as possible about the shoulders to see that the cord is not engaged around the neck, and that there is no prolapsus of the cord, and if I can spare my left hand, I apply it over the fundus, but it often requires both hands to manipulate the baby until it is completely in the world. I then grasp the fundus uteri in my left hand and secure or retain firm contraction, at the same time.

I watch the child, the cord and the vaginal orifice to see that all is going well. In the course of two or three minutes I clasp the cord, sever it and remove the baby, giving it to an assistant to care for until I have completed the third stage of delivery. In managing this stage I am more hasty than many of our profession are. As soon as I have removed the baby from the bed, I again put my left hand on the fundus and my right at the vaginal orifice, grasping at the same time the cord between my index finger and my thumb, and by sliding my hand, or at least two or three fingers gently into the vagina, I soon come in contact with the placenta, and grasp and remove the same at once, following down the contraction with my left hand on the fundus, which I continue to grasp for several minutes. After removing the placenta, I re-insert my

fingers into the vagina and up into the os uteri to be assured that there are no shreds of the membranes, nor blood clots left behind.

I examine it carefully to ascertain that no membranes, blood clots or portions of placenta remains. I now remove the secundines from the Kelly pad into a receptacle such as can be had, sponge off the external genitals with sterilized gauze and apply a thickly folded gauze well dredged with boracic acid to these parts. I now instruct the patient to place both of her hands over the fundus, showing her where and how to put them, and instruct her to make gentle pressure here until I look after the new comer.

I prepare a basin of warm water, soft if it can be had, into which I break an egg, and beat it well with my hand, and have an assistant, if I have any, wash the baby thoroughly with this, using no grease and no soap; when he is well washed and dried, I dust him all over with talcum powder; before the washing began I have ligated the cord and removed the clamp, I then dress the stump with gauze which is well dredged with boracic acid, and apply the binder closely and smoothly, then weigh him and turn him over to the assistant to complete the toilet. Now I turn my attention to the mother, by again placing my left hand over the fundus and use slight friction, if there is a tendency to hemorrhage, and my right hand near the vaginal orifice to see that there is no unusual hemorrhage; in this position I give myself a little needed rest.

When the baby's toilet is complete, about three quarters of an hour have now elapsed since he was born, I have the nurse to bathe her hands thoroughly in a bi-chloride solution, and I prepare another of 1 to 2000 strength and have her take a piece of absorbant cotton and clean the mother's genitals, thighs and hips thoroughly, having first removed my Kelly pad leaving the clean folded sheet which was under the pad. When this is done I apply to the entire external genitals a large piece of absorbant cotton folded between two folds of gauze, and press it closely into all their folds. Next I remove this folded sheet, which is usually slightly soiled, and if the mother's clothing is soiled remove it at the same time, putting on clean clothing such as she is in the habit of wearing, and fold another clean sheet and place it under her hips. I now apply the binder, pinning it closely from bottom to top, so as to adjust it to the entire lower abdomen, neatly, closely and comfortably. One hour or longer has now passed since the birth, the

mother is now permitted to turn on her side, up to this time she has been on her back, and baby is placed in the bed with her, so as to warm him up by the warmth of her body, and usually given the breast and encouraged to nurse. I instruct my patient to urinate when she feels the first inclination to do so; it is my custom to advise her to place her vessel on a stool or box, about eight or ten inches high, and slip herself gently off onto it, by first putting her feet out of the bed, then sliding off her hips, so as not to assume the standing position; I have found this the easiest and safest way to empty the bladder during the post-partum period. All of this time my patient has been on her back and covered with the same amount of cover under which she sleeps at that season of the year, having next to her a clean sheet, and I have not exposed any part of her body except the outside of her right thigh and hip, which is done during the removal of the baby and the secundies from the bed; all else is done strictly under cover. The patient and attendant are instructed to keep close watch over the nipples and breasts, to clean the former with an alkaline solution after each nursing, and dry them and dust them with talcum, or better, boracic acid, and if the breasts get full and hard, to remove the milk with the pump. The attendant is given several bichloride tablets and instructed to sponge the mother's external genitals once a day with a 1 to 2000 solution, no douche to be used. The patient is instructed to take a laxative at the end of about forty hours from the birth of the baby.

CYSTS OF THE PANCREAS WITH REPORT OF CASE.*

BY THOMAS STONE LEWIS, LEXINGTON.

Cysts of the pancreas are comparatively rare. Oser of Vienna was able to collect but one hundred and thirty-four cases from literature available. In this country Nicholas Senn collected eighteen cases and W. S. Johnson thirty-five cases. Gussenbauer first called attention to the correct diagnosis and treatment of pancreatic cyst in 1882. Since that time Körte has collected, up to the beginning of 1902, one hundred and seventy-seven operations for this condition. Segré of Milan found that in the eleven thousand, four hundred and seventy-two postmortems held in that city, there were one hundred and thirty-two tumors of the pancreas. Of these, only two were cysts.

Dickhoff, Tilger, and Lazarus were the first to make systematic studies concerning the origin of pancreatic cysts. Their classification is the most complete and satisfactory. They divide them into:—

1. Retention cysts of the pancreatic ducts.
2. Retention cysts due to obstruction of the minor branches of the pancreatic duct;
2. Proliferation cysts or cystadenomata;
4. Cysts that develop by softening in tumors;
5. Traumatic and inflammatory pseudocyst of the lesser peritoneal cavity;
6. Echinococcus cyst.

These will now be taken up in detail:

1. Retention cysts of the pancreatic ducts.

In taking up this division, review of the anatomy of the pancreas may be helpful. Opie, in his splendid work, states that the pancreas, embryologically speaking, begins as three buds, two on the ventral surface of the duodenum and one on the dorsal surface. The ventral buds unite at an early period. The dorsal buds arising between the bile duct and the stomach, forms the duct of Santorini. The ventral buds after fusing, form the pancreatic duct or duct of Wirsung. When the embryo has reached its sixth week, the dorsal and ventral parts unite and at the end of the second month anastomosis is complete, including the ducts.

The duct of Santorini now undergoes partial atrophy and the lower channel increasing in size appears as a continuation of a large duct, which derived from the dorsal outgrowth or bud, follows the axis of the gland. Hence, the duct of Wirsung or main pancreatic duct, which affords an outlet for almost all of the pancreatic fluid is derived in the head of the gland from the ventral buds and in the body from the dorsal bud. This embryologic beginning of the pancreas, also, accounts for the cleft that exists in the head of the gland, which divides it into two lobes; the lobe Santorini and the lobe of Wirsung and extends backward to the anastomosis of the two ducts. In a certain number of cases, the duct of Santorini remains larger than the lower or duct of Wirsung. In other instances no anastomosis exists.

In the examination of one hundred and four bodies the relations of the two ducts were as follows:

I.

1. Duct of Wirsung larger,
 - (a) Duct of Santorini patent...sixty-three
 - (b) Duct of Santorini not patent.....twenty-one.
2. Duct of Santorini larger or equal to the duct of Wirsung.

* Read before the Kentucky State Medical Association October 11, 1906.

- (a) Duct of Wirsung patentsix,
 (b) Duct of Wirsung not patent . . .none.

II

Ducts not in anastomosis,

- (1) Duct of Wirsung largerfive,
 (2) Duct of Santorini largerfive.

According to this more than one-half of the specimens show both ducts open, and roughly speaking, in one specimen out of ten, there is no anastomosis of the ducts. So much for the anatomical features. Retention cysts can now be taken up with a better appreciation of the problem involved.

Nicholas Senn has found it impossible to cause development of cysts by ligation of the ducts in dogs, although secretion continued as was shown by an external fistula that had been established. After a series of such experiments, he concludes that the most important etiologic factor in the development of pancreatic cyst, must be sought in the hindrance to the absorption of the pancreatic juice by admixture of some pathologic non-absorbable substance or a lessened activity of the absorbing vessels. The closure of the duct may cause stagnation, but will never be the sole cause of retention cysts in an otherwise normal gland. This view is sustained by the experiment of Thiroloix, who tied the duct of Wirsung in a dog and injected a mixture of soot and carbolized vaseline. Three weeks later the dog was killed. The splenic part contained a large cystic cavity, containing clear fluid and a large number of calculi.

However, it remains a fact that most cysts are retention cysts in the sense that there must be first a closure of the main duct or its branches with consequent stagnation of secretion. It may be closed from without by a small tumor compressing the duodenal orifice, as is reported in one case. There may be swollen lymph glands, peripancreatic scars and adhesions, especially in the neighborhood of the head. Pancreatic concretions obstructing the duct as a rule are followed by large cysts; some reaching the size of a child's head. One case is reported in which an ascaris lumbricoides was the cause of obstruction. Tumors in the head produce cysts by compression. Although it has never been demonstrated, it seems probable that the duct may be closed by catarrhal inflammation, as is the case with the bile passages. The most frequent cause of obstruction is a gall stone lodged in the diverticulum of Vater or just above this point. The anatomical relations of the pancreatic and common bile ducts are such, that it is almost impossible for a gall stone to pass out to the duodenum without closing partially or completely the pancreatic duct in its career. Bearing this in mind,

delay in operating on cases of gall stones will frequently allow the development of a fatal disease of the pancreas.

2. The second division, retention cysts due to obstruction of the minor branches of the pancreatic duct, are the most common of all and are due to chronic indurative pancreatitis. The smaller branches of the duct are compressed and bent by the contraction of the newly formed connective tissue. The stagnant secretion undergoes chemical change rendering it more tenacious, still further preventing its flow. Those furnish Senn's ideal requirements for cyst development, i.e., obstruction to duct, changed secretion and lessened absorption caused by the chronic inflammatory process.

According to Diekhoff, the development is as follows: First from some unknown cause, a chronic indurative pancreatitis develops, beginning in the head of the gland and advances insidiously; in consequence, enlargements of the excretory ducts, caused partly by contraction of growing connective tissue and partly by stagnation of secretion. The increasing dilation of several cysts and disappearance of intervening walls result in the formation of large cysts.

3. Proliferation cysts are very rare and are regarded as cystic degeneration of the pancreas analogous to that of the kidneys, testes or mammary glands, since there is no proof of duct obstruction. Some of them are considered congenital. One was removed from a child three and a half years old.

4. Cysts that develop by softening tumors occur in carcinomatous and sarcomatous growth in the pancreas much in the same way it takes place in any other situation, i.e., by degenerations of the poorly organized tissue. Sometimes they develop by degeneration of a part of the pancreas in acute pancreatitis. The so-called apoplectic or hemorrhagic cyst belong to this class. Hemorrhage into the pancreatic tissue following injury or rupture of degenerated blood vessels is not absorbed. As a rule some of the pancreatic ducts are ruptured at the same time, allowing enough secretion to escape into the hematoma to digest its contents, forming a cyst containing more or less clear fluid.

5. An inflammatory or traumatic exudate may rupture into the lesser peritoneal cavity and so simulate a cyst of the pancreas. As a rule these follow violent injuries to the abdomen. One author reports the following case: A man, after falling from a wagon, suffered from dyspepsia and debility. After eight weeks, symptoms of pleuritic exu-

dation. Evacuation of a turbid, dark fluid. This came from the peritoneum and entered thoracic cavity through rupture in diaphragm. At the end of a week an elastic round tumor was found in the epigastrium, which was dull on percussion. On aspiration 300 c. c. of alkaline, turbid, albuminous fluid were evacuated. Renewed swelling. The tumor was aspirated a second time. Fluid last obtained contained a ferment saccharifying starch. At the laparotomy a cyst was found at the right of the stomach and near the stomach and above the intestines. Cyst was sewed to the abdominal wall and drained. The case illustrates the difficulty in determining the origin of fluid collections in this space, because sometimes the pancreatic ducts are injured and give the exudate the same characteristics of a pancreatic cyst fluid. In some cases of necrosis of the pancreas without gangrene, the lesser peritoneal cavity is filled with liquified necrotic material simulating a cyst. Such a case was related to me by E. V. Green, Martinsville, Ind., in which the pancreas was sequestered and floating in fluid. The terrible destruction followed an attack of gall stone colic, with passage of stones per rectum.

6. Echinococcus cysts are mentioned, but rarely, and are similar to those found in the liver and other situations.

To this sketch of the various varieties of pancreatic cyst, I will add the report of a case that came under my care, which still further emphasizes the danger of grave pancreatic disease following neglected cases of gall stone colic.

Mrs. K., attendant at the E. K. L. Asylum of Lexington. Aged forty-four years; weight two hundred and thirty-seven pounds; family history good; complexion somewhat sallow; conjunctiva clear. Began to have trouble with stomach fifteen years ago. Had so-called bilious attacks every two or three months, attended with vomiting of yellow fluid, which had an intensely bitter taste. These were followed in a short time by cramps in region of stomach. The bilious trouble would last from three or four days to a week, but cramps seldom continued for more than two or three hours. Appetite was always good, but just before these attacks, it was ravenous. Patient states, if she resisted this and ate but sparingly, the attacks came on just the same. Between these attacks, she had good health and digestion seemed to be perfect. During these attacks she was not confined to bed but for a few hours at a time. Began to notice fullness in region between lower margin of costal arch and umbilicus six months ago. Urine negative.

The present illness began Jan 29th. On this date she retired feeling perfectly well, but was awakened at 3 A. M. by severe cramps in upper abdomen. C. A. Nevitt of the Asylum Staff was called to see her and gave some morphine with temporary relief. These kept up for several days without much intermission and on the seventh day, she had a chill, high fever, dyspnoea and all the signs of lobular pneumonia. At this time Dr. Nevitt turned the case over to me. The recovery from this was slow and she had a number of cramping attacks during its course, which I took to be gall stone colic. On Feb. 23rd she was taken to the hospital and put on succinate of soda and olive oil, by mouth. The nurse misunderstood my orders and gave the olive oil by rectum. I also ordered stools to be screened. By this time patient had lost much flesh and I could make out mass in upper abdomen lying in the middle line and above the umbilicus. Dr. Barkley examined the case with me and we came to the conclusion that it was a dilated gall bladder and advised operation, but thought patient had better wait till convalescence from pneumonia was more complete. Three weeks later, after one of her cramping attacks, which were of almost daily occurrence, she began to pass gall stones the size of the end of the little finger. This seemed to give great relief, but there remained great tenderness over the upper abdomen. She was not jaundiced at any time, nor were the stools white. Although I saw many of these, I saw none in which there seemed to be any free fat.

I performed the operation April 14th, assisted by A. H. Barkley. The abdomen was opened by usual incision, except that upper portion was continued upwards and inwards following costal border to gain room on account of great thickness of abdominal wall. As soon as peritoneum was incised, a large fluctuating tumor size of a child's head, presented, pushing the transverse colon downward and forward and the stomach to the left. It was covered above by the lesser omentum, in front by transverse colon and meso-colon. On palpating the gall bladder, found it enlarged and containing stones. Pulling it down into the wound, it was seen to be fairly healthy in appearance. The cystic and common ducts were palpated and found to be free from stones. Gall bladder was removed, cyst incised through the lesser omentum, after packing around tumor, evacuating about three quarts or more of thin watery fluid of a yellowish green color, containing some greenish masses of the consistence of putty and as large as almonds. The sack was washed out thoroughly with normal

saline and then stitched to the edges of the wound. One cigarette drain was placed in the sack, one leading to stump of the gall bladder and one under liver directed towards the right kidney. The abdominal wound was closed in layers, leaving space in the upper part of incision for drains. Convalescence was uneventful, except for the enormous quantities of fluid that came from the sack and the digested moth-eaten appearance of the fat wall about the mouth of the fistula, that was seen from the beginning. It had to be dressed two or three times a day for weeks. At the time of operation, the interne injected a pint of saline into the glandular tissue of left breast, which caused necrosis of about one-half of it. This caused more suffering than the operation wound. The skin on the abdomen had to be well protected with zinc oxide to prevent excoriation. I suppose the presence of the pancreatic ferments may have had something to do with this. Patient sat up on 17th day of June, left the hospital on the 27th; fistula closed on July 12th and she returned to her duties as attendant at Asylum about July 20th and has remained perfectly well up to the present date.

THE POISON IN CIGARETTES.*

By S. S. AMERSON, SULLIVAN.

The cigarette smoker learns to love the effects of cigarettes as the opium eater does the opium. Cigarette smoking has long been given up to be one of the great evils of the day and especially among boys, hence the legislation against the sale of cigarettes to boys, or even allowing them to become the possessors of them in any way.

For a time the poison was said to be put into the tobacco in the manufacturing of the cigarette or the cigarette tobacco. Later it was said to be in the papers, again it was said to be in the mucilage the papers was sealed with. Chemical tests proved all these claims or theories to be false.

I claim the poison is manufactured in the cigarette as it is smoked.

Upon pure chemical basis do I make this claim. And never will the evil of cigarettes be stopped so long as they are smoked and the smoke inhaled.

Chemistry teaches that carbon dioxide (CO_2) is not poison but will produce suffocation, that carbon monoxide (CO) is a deadly poison and the quickest one known, when a sufficient amount is imbibed to produce death, which is one full inhalation of it, and the person falls without speaking. Carbon

monoxide is a colorless, tasteless, inodorous gas, insoluble in water. It will support combustion with a pale blue flame, forming carbon dioxide. It is exceedingly poisonous when inhaled. There has been a great deal of discussion and some legislation on this gas, known as "water gas." Carbon monoxide is produced in smothered fires, the more the fire is smothered the greater amount of the carbon monoxide is formed. You can see it in an open grate as the coal melts or runs together, or the ashes prohibits free oxygenation, that pale blue blaze flickers above the burning mass which is the carbon monoxide gas, combusting again and forming (CO_2) carbon dioxide. A pan of smouldering charcoal produces it in abundance and has been used in France to commit suicide.

In the smoking of the cigarette which can be made to burn from half-inch to an inch at one draw, and the ash remaining upon the end shutting off free oxygenation which means a smothered fire or combustion and is bound to form some carbon monoxide (CO), this smoke being inhaled the (CO) carbon monoxide reaching the lungs, is bound to act, and thus the detrimental work is done to the smoker. It is true the amount imbibed at each time or from each cigarette is small, but like any other poison which could possibly be there even in small amounts in each cigarette, kills gradually and in proportion to the number of cigarettes smoked, each day, week, month and year, there is no greater poison that could be in a cigarette nor none more sure to act. And I have never known or heard of a cigarette smoker being hurt who did not inhale his smoke.

The smoke from cigars and pipes would even kill quicker as they have more (CO) carbon monoxide manufactured in them. But the smoke is so strong they cannot inhale it, hence the (CO) gas is only taken in the mouth and puffed out, it does not reach the lungs where it must go to get its action, proper, which I think conclusive evidence that the poison in cigarette smoking is due to the smothered fire forming carbon monoxide, and it being inhaled, little by little kills the smoker.

NERVOUSNESS AND FAITH.*

By THOMAS PERKINS TRIBUNE.

If it is true, as is often said, that Americans are becoming more and more nervous, it must be that there is a cause and a remedy

* Read before the Crittenden County Medical Society, December, 1906.

for this condition.

The tension of our life is very great, surely; for all its interests seem to be urgent and insistent. We live in a hurry; eat in a hurry; are in a hurry to arrive at the train, or the office; and we are equally in a hurry to become rich or to reach the same standing in society with our neighbors. It may be that steam and electricity have brought about this attitude of mind, for the train waits for no man, and electricity performs our tasks so quickly that we desire to acquire the same alertness of movement. It is certainly true that the school boy and the college youth are impatient of the years they are compelled to devote to study, and the man is not contented to plod on year after year in the old slow way which leads to assured success. We wish to arrive at once at the goal of our ambition, and rebel against the steps which must be taken in order to obtain the end of our desire.

We live under a constant nervous strain, are excitable, eager and restless. We rush to the train in the morning, and we rush to it again when the day's task is done. Much of our education goes on in the same way, and is undertaken, not for the sake of knowledge and culture, but for immediate ends of examination or graduation. Patient, quiet, steady effort, many people have become incapable of; for they never have learned to wait or to rest.

Nervous haste is a sign of weakness. It implies lack of self-control, want of mental poise, absence of harmony, and failure to secure unity of purpose. It is a sure indication of the absence of faith in the persistence of what is true, right, and good, and impatience of the laws and processes of growth, and a want of trust in the methods of nature to secure the ends of its own well-being.

The nervous tension under which we live has given rise to the conviction, on the part of a great number of business men, that no one can attain success unless he is willing to "HUSTLE." This implies that one is always ready to hurry, jostle, compete and destroy, to do anything, in short, which is not crime, in order to gain success for himself. Therefore, conscience is not to be too much in the way, honesty is not to be held too high, scruples about cheating are to be smothered, and the whole of life is to be absorbed in business. Leisure for reading, study, serious contemplation, or religion, is not to be thought of; and, to the ordinary business man, such leisure would be of all things the most burdensome.

In a measure, all life is pervaded by the same spirit; and the professional man, too, is driven to the same tendency to competition and ambition. The specialization of the professions has a like result of keeping men always on the alert, and anxious to secure fresh achievements. Even the farmer is driven into discontent, nervous dissatisfaction with the situation, and hysterical anxiety to find a remedy for his trouble. Women have caught the fever of the time, neglect simple and homely duties, take up tasks for which they are not prepared, and rush into occupation for which they are not fitted. The club is too often a feeble outlet for the thoughts of shallow women, intent on accomplishing what there has been no legitimate discipline for, and who are unwilling to undertake the honest duties which are within reach.

It is not necessary to go further in the specification of what we have all seen and felt. The nervousness, excitability, fever of competition, and rush for success, which characterize our people, have been noted by every intelligent observer. It is time we seriously consider the remedy. It is not to be found in withdrawing the cause of the evil, in a return to honest and legitimate business methods, and in ceasing our hurry and rush? The happiness, thoughtfulness, and right issue of life do not depend upon our reaching the 7:20 morning train, or in our securing \$10,000.00 as an addition to our possessions during the present year. If we would cease from our grasping, elbowing and pushing, we would live longer, more healthily, and more happily.

A business man a few days ago, told me that it has been his habit to always clutch at something within his reach, to grasp it with nervous eagerness as if he were in a train thrown down an embankment. Even in our hours of rest, we assume unconsciously, this attitude of nervous tension. The muscles are strained constantly, even when we are sitting in a chair or lying in a bed. We do not unbend, throw off care, and allow body and mind an attitude of entire repose. We need absolute rest, if we would secure the highest bodily and mental power. The remedy for our nervousness is repose. We need to learn how to rest. The way is to unbend, allow muscle and nerve to cease all unnecessary action, throw off care and worry, and live for a part of each day a vegetative or animal life. Lax muscle, quiet nerve, dormant feelings, and stagnant mind mean recuperation and new power to the healthy man and woman, when they are tired out or exhausted. Indeed, there is no way to genuine

power, except through that repose, which allows inward, silent, sub-conscious growth, which brings life into contact with primal forces, and secures for it renewal of strength. Without such renewal there must come a breakdown, nervous prostration, and a life wrecked. It is, perhaps, unnecessary to say that such a recuperation through rest and repose is not merely physical; but it is moral and mental, too. Permit me, to carry the remedy at least one step further, and show you that silence is as necessary to the mind as repose to the body. Its effect is in the same way hygienic and remedial, giving tone, fresh access of power, and the harmony of life which is helpful to true thinking. In no way does our nervousness show itself more disastrously than in our inability to sleep, in a restless eagerness of the mind, in our failure to control our thoughts, and in the dogged persistence with which foolish, or even criminal suggestions continue to haunt mind. The remedy for this disease of the mind, this distemper of thought, is found in silence, in ceasing to think, in allowing the mind to become idle for a time. In a case of this kind, I would propose that, for fifteen or twenty minutes each day, we allow the mind to rest as absolutely as possible by ceasing to think. At first, this will be a very difficult thing to accomplish, and many persons will be ready to say that it is impossible. Of all things, the controlling of thought to this extent seems the most difficult, so persistent is mental action, so rapidly does image after image and suggestion after suggestion rush through the brain. There is no moment when neurosis ceases, and, consequently, there is no moment when psychosis comes to an end.

It is possible, however, to train the mind to silence, to stop the rush of hurrying suggestions and thoughts, and to allow the inward life to repose and calm. After a number of efforts, it will be found that the physic storm can be hushed, that repose of mind can be attained, and that the conscious flow of thought can be made to cease. The effect at first is almost startling, in the return of the soul to that state of the sub-conscious which is nearest to nature, in the buoyant, calm, and restfulness which ensues, and in the sense of harmony which takes possession of one's being. Perhaps the most startling phase of this experience, however, is the feeling which ensues, that the body is rising from its place, and floating in the air, and even that one is leaving the body behind in the expanse and enlargement of the soul. It will give the clew, perhaps, to many of the experiences of religious devotees, and en-

thusiasts of all sects and faiths. Certain it is, that the hygienic effect of this experience upon the mind is wholesome, recuperative, and sanative. It gives the mind calm, adds to its power of accomplishment, and restores it to its youthful buoyancy.

That there is a restorative power in the withdrawal of the mind from outward interests and care, is nothing new to thoughtful persons. It is interesting, however, to have this truth presented in the name of hygiene, and as a means of securing physical health. What had been hitherto regarded, from a religious point of view, is shown to have a legitimate basis in the nature. About this there is nothing surprising; for every step of advance in psychology shows more clearly in the inter-dependence of body and mind; and that psychosis is the subjective side of what is objectively known as a neurosis. We can not keep up a constant round of nervous excitement without a disastrous effect upon brain and mind alike. On the other hand, mental repose is undoubtedly helpful to the body in a high degree. Self-control, calm continuity of thought, and a simple, restful faith, have their effect upon health, and all the bodily functions. If a life of trust had no other reason to justify it than this, it would be quite sufficient, that it conduces to physical well-being.

Serenity of mind, my friends, has a saving power for body and soul alike. Fret, worry, and doubt are as potent causes of ill health as microbes and filth. Their curing is to be found in an increase of faith, in repose of mind, and in quiet discharge of duty. If we could believe it, there is that in the universe which makes it forever safe. This Gracious Care is equal to our needs, as well as to those of the cosmic whole. We need not every day live in the midst of fears and alarms; and we will not, if we are confident that, underneath us are the Everlasting Arms.

The remedy for our nervousness is always at hand. It is not to be found in pills, and specifics, and not even in physicians and health resorts. What we need is to live near to Nature's heart, keeping the mind serene, and the conscience void of offense.

"Rest is not quitting

The busy career,

Rest is the fitting

Of self to its sphere."

Adjustment to the cosmic order, the feeling that we are at home in the world, that it belongs to us and we to it, brings to the soul that quiet of spirit we need for healthful living. Discontent is a serious evil; it might well be classed among the seven deadly sins.

The remedy for it is not to be found in change of scene, but in change of attitude, even in the acceptance of that which we hate and in love of that which we now shun.

The thing which to-day worries, will grow less in its power over us to-morrow, if we have touched it with the magic wand of trust. I can not make the sun shine when the dark day has come; but, if I find any light within of faith, courage, and hope, and give it an opportunity to make its effulgence known, it will take away the darkness and restore to my soul the full orb of day. What I need is to come out of the darkness of my own mind, with its fear and disquiet, into the free air of the world, into friendly sympathy with my fellow-men, and into child-like faith in God. Even the stormy day, that makes us shrink from its rain above, and its mud beneath, is full of health and joy, if we but brace ourselves to face it, and to look about for its beauty of contrasting elements. Sleet and snow will not harm us, when we are resolute to face and overcome it. A bracing will and active mind, a self-poised soul are potent forces for overcoming the world, and for making its discord turn into peace and harmony.

DIAGNOSIS OF PRIMARY BLOOD DISEASE.

By B. J. O'CONNOR, LOUISVILLE.

By primary or essential blood diseases, we understand certain diseases, of the blood, due to unknown causes, in which the chief pathological lesions are found in the blood itself and in the blood-forming organs. The blood, while the most important, is the most complex of any animal tissue, there being at least six different types of cells present therein. Ordinarily we are accustomed to think of but two, the red cells, and white cells. There are but two diseases affecting the red cells which can be classed as primary, namely: Chlorosis and Pernicious Anaemia; affecting the white cells we have likewise but two: Lymphoid Leukaemia, and Myeloid Leukaemia.

Chlorosis occurs almost exclusively in girls about the period of puberty, and is characterized by a destruction of the haemoglobin contents of the red cells. As yet the exact cause has never been discovered. Pernicious Anaemia occurs in adults and is characterized by a rapid destruction of the red blood cells, being presumably due to the absorption of some toxin which renders the blood serum an asotonic fluid. There are, however, cases of severe anaemia, caused by worms, the *Uncinaria* in Porto Rico, the

Brothriocephalus Latus in Norway, and Scandinavia, which are said to resemble Pernicious Anaemia in almost every detail, except that they are curable after the removal of these parasites. In genuine Pernicious Anaemia, which is common on the European Continent, no such caustive factor has been found, and the disease, despite all treatment, ultimately terminates in death. Before we can arrive at a positive diagnosis of the disease, we must exclude the similar anaemias caused by these two different forms of worms, which can be accomplished by demonstrating their absence from the intestines through the administration of proper vermifuges, and careful examination of the feces.

The Leukaemias are characterized by a hyperplasia, or tumor formation, of tissues or organs which manufacture the white blood cells, and by the appearance in the blood of abnormally large numbers of leukocytes. The etiology of these diseases is still more obscure and hidden than of those affecting the red cells. To a certain extent they resemble malignant tumors, while occasionally they seem to be infectious in nature.

The chief clinical evidences of chlorosis are the pallid, greenish-yellow complexion, blanching of the mucous membranes, dizziness, shortness of breath, scanty menstruation, gastro-intestinal disturbances, and functional, or hemic heart murmurs. On the slightest prick of the ear or finger, pale, watery-looking drops of blood exude readily, suggesting that there is plenty of blood fluid despite the picture of intense anaemia. Microscopic examination of a fresh blood film shows, that the number of red cells is not greatly diminished, that the cells are about normal in size and contour, but that they are almost entirely devoid of their coloring matter, hemoglobin. The cell or depression in the center of the cells is unusually large and only a little rim of hemoglobin is found around the edge. The specific gravity of the blood determined by Hammerschlag method, varies from 1030 to 1040. This is dependent entirely upon the diminished amount of hemoglobin which, on estimation of any of the various instruments is found to be from 30 to 50% of the normal. Blood count shows on an average about 4,000,000 red cells. The color index, the proportion between the amount of hemoglobin and the number of red cells, which represents the color or amount of hemoglobin in the individual red cell, is about 1-2 of 1, or decidedly less than normal. The white blood

cells in this curable or self-limited blood disease present little or no abnormality.

Chlorosis is to be differentiated from the large group of Chloranaemias, or secondary anaemias by the facts, that in the latter, we find a definite cause, a disease, which produces anaemia, that the loss of hemoglobin is proportionate to a decreased number of red cells, and that usually a certain degree of leukocytosis is present.

Pernicious Anaemia, as defined by Türk, is a primary disease of the blood, caused by some unknown factor, progressive in nature, but attended with decided remissions or periods of marked improvement, finally, however, terminating in death; characterized, clinically, by all the symptoms of a profound anaemia and pathologically by a rapid destruction of the red blood cells and by the appearance in the blood of numerous unripe forms of these cells.

To fully appreciate the classical picture presented by the blood in this disease and the meaning of unripe cells we must briefly review the origin of the cells. In adult life the red cells are manufactured in the bone marrow, they originated as irregularly shaped nucleated cells containing hemoglobin. In the course of their differentiation in order to carry out the highly specialized function which nature demands of them, they, normally, while still in the bone marrow, lose this nucleus and assume a definite round disk shape. Therefore in the normal circulating blood we find but one variety of red cell, the erythrocyte or normocyte, a biconcave, disk-shaped non-nucleated cell containing haemoglobin. When however, there is a rapid loss or destruction of blood, nature in endeavoring to repair this loss, to regenerate this destroyed tissue, makes such great demands on this erythroblastic tissue in the bone marrow which manufactures the red blood cells that numerous unripe, not fully differentiated cells are thrown into the circulation. Hence in conditions of this kind we find irregularly shaped, ovoid, elliptical pear-shaped, etc., non-nucleated red cells, these are poikilocytes; we find, moreover, nucleated red cells about the same size as the normal red cells, these are called erythroblasts or normoblasts, they may be larger than the ordinary sized cell and are then styled megaloblasts, or smaller, microblast; we find furthermore non-nucleated cells larger than the typical red cell these are named megalocytes and smaller, microcytes. The termination "cyte," meaning a non-nucleated cell, while "blast" indicates a developing not fully formed nucleated cell. Severe hemor-

rhages for example are repaired first by the absorption of an equivalent amount of fluid from the tissues and then by the restoration of the cellular elements. If the blood is examined a day or so after such a hemorrhage we find evidence of the activity of the erythroblastic tissue in the shape of numerous nucleated red blood cells. In a few weeks such cells disappear entirely from the blood.

In pernicious anaemia we have to deal with some factor which causes not only a rapid but a continuous destruction of the red cells, as a result of which very peculiar changes take place in the blood. On puncturing the ear or finger even deeply we find that but little blood exudes, that it looks pale and watery, corroborating the intensely anaemic appearance of the patient. The specific gravity of the blood is found to be about 1030, and the amount of haemoglobin from 20 to 30% of the normal amount. On examining a fresh blood film the trained eye instantly notes a great decrease in the number of red cells, the absence of rouleaux formation, the irregular shape of the vast majority of the cells, poikilocytosis, the presence of numerous nucleated red blood cells some smaller and others larger than normal, and considerable variability in the color or amount of haemoglobin contained in the individual cells but that as an average that each is better colored or contains more haemoglobin than the normal cell, the color index always being one or over, higher than normal. The diagnosis can be made from this picture alone as it is absolutely characteristic. Blood count shows about 1,000,000 erythrocytes to the cubic millimeter, although the count may range from 200,000 to as high as 3,000,000, the latter figure, except during the remissions, being an extremely rare number. Relatively there is a leukocytosis, but actual count shows about 4,000 whites to the cmm. which is a leukopenia. The decrease in the whites is due exclusively to a diminished number of the polynuclear cells. A few myelocytes may be occasionally found in the blood in this disease.

Before leaving the red blood cells we might mention the fact that exceptionally cases of carcinoma of the stomach show practically no differentiating points from this disease except, that on examining the blood we found an ordinary picture of secondary anaemia and the absence of the clear-cut, unmistakable appearance of pernicious anaemia. Occasionally cases of carcinoma with multiple metastases in the bone marrow will occur and owing to their

growth in this important tissue cause the extrusion into the blood of not only unripe forms of red blood cells but also of the whites. The blood picture here may be somewhat confusing but the primary growth will render the diagnosis easy.

In taking up the diagnosis of the primary diseases affecting the white cells and the tissues which manufacture these cells we must review briefly, the nature and the origin of the leukocytes. Although in health there is but one white to every 750 red blood cells, there are different varieties of these cells found in the blood. The first variety is the lymphocyte, a small round cell, about the size of red cell, with a very large dark staining nucleus, and but a thin rim of protoplasm or cytoplasm around the edge of the cell. This variety constitutes from 20 to 25% of the total number of leukocytes. They are so named on account of their origin, the lymphatic system. They are manufactured in the lymphatic glands, in the tonsils, in the solitary follicles and Peyer's patches of the intestines and in the Malpighian follicles of the spleen and are passed out through the efferent ducts of these glands, into Ductus Thoracicus and thence into the circulating blood.

The second variety is the large mononuclear leukocyte, a cell about four times the size of the lymphocyte, with a large ovoid, deeply staining nucleus, and a relatively large amount of protoplasm. These cells form but 1 to 2% of the total. Equally small in numbers is the third variety, the transitional leukocyte, a cell which resembles the preceding in every detail, except that the nucleus is deeply indented, or U shaped. This cell is so named because it is undergoing apparently a transition from a mononuclear leukocyte to the next variety, the polymorphonuclear or polynuclear types. These cells, about the same size as the foregoing, have a multishaped, or several nuclei. The nuclei of the polynuclear cells stain more poorly, a lighter blue, and the protoplasm is studded with numerous peculiarly staining granules. If these granules are fine and have a special affinity for neutral stains, the cells are called polynuclear neutrophils, the fourth variety, which constitutes 70 to 75% of the total number of leukocytes. This cell is the so-called phagocyte which is found in great numbers around inflammatory areas, and which is found in the blood in increased numbers in conditions of leukocytosis. If the granules in the protoplasm of these cells are large and show special affinity for acid or eosin stains, they are called polynuclear eosin-

ophiles, which form 2 to 5% of the total number.

The four last mentioned varieties of leukocytes originate in the bone marrow and in the spleen, the so-called myeloblastic tissue, as large mononuclear cells with a protoplasm devoid of granules. It is impossible to say whether in the process of their differentiation changes take place first in the nuclei or in the protoplasm. The large mononuclear and transitional leukocytes, by some authors styled lymphocytes, are perhaps more correctly to be regarded as unripe forms of the polynuclear cells. In myeloid leukaemia we find large numbers of other unripe white cells, called myelocytes, or marrow cells, with a single large, ovoid, poorly staining nucleus, the protoplasm of which may contain neutrophilic granules, neutrophilic myelocytes; eosinophilic granules eosinophilic myelocytes, or granules, which having a special affinity for basic stains which being soluble in water the stain of these granules is given up when the stained blood-film is washed in water and they appear under the microscope as little vacuoles scattered throughout the protoplasm, these are basophilic myelocytes, or mast cells. Another variety of myelocyte which is named after its describers, the Corneli Mueller Myelocyte has no granules whatsoever in the protoplasm. Myelocytes are pathological undeveloped polynuclear leukocytes and hence never found in perfectly normal blood.

Bearing these facts in mind we can readily appreciate the definition and significance of the leukaemias. Lymphoid or lymphogenous leukaemia, for example is defined a primary disease of the blood affecting the white blood cells, of unknown etiology, usually chronic in course, terminating fatally in from three to five years, characterized by hyperplasia and tumor formation of the lymphoblastic apparatus, the lymph glands, tonsils, Peyer's patches, etc., and by the appearance in the blood of excessive numbers of ripe and unripe lymphocytes.

The hyperplasia is usually general but at times may be regional or localized. In exceptional acute case which may terminate within two months and in the advanced stages of the chronic form this hyperplasia involves not only the lymphoid tissue scattered about in various parts of the body as already mentioned, but an apparent infiltration or new growth of this lymphoid tissue occurs in such organs as the liver, kidney, bone marrow and even in the skin, situation, in which ordinarily, we can find little or no lymphoid tissue. In the common chronic

form of the disease, there is a slight elevation of the temperature, slow and gradual enlargement of the lymphatic glands, etc., with but little pain, whereas, in the acute cases there are occasional rigors, a temperature of about 102° , febrile symptoms and considerable pain in the new growths. Examination of a fresh blood film shows an excessive number of white cells. Actual count of the blood reveals from 50,000 to 500,000 leukocytes to the cubic millimeter, consisting almost exclusively of lymphocytes, the other varieties of leukocytes being apparently but only relatively diminished in numbers. These lymphocytes resemble the normal but many present variations in the size of the cell or the nucleus, or in the staining properties. Only in the advanced stages of the disease or in the acute cases is there any anaemia or interference with the red cells, at this time owing to hyperplasia of lymphoid tissue in the bone marrow, causing pressure on both the erythroblastic and myeloblastic apparatus. Nucleated red blood cells, poikilocytes, and myelocytes may be found in the blood.

Syphilitic, tubercular, and even malignant enlargement of the lymphatics are usually easily differentiated by the clinical symptomatology. Adeno-sarcoma resembling perhaps a regional leukaemia demands an examination of the blood. Likewise, Hodgkins' disease, or pseudo-leukaemia, which has lately been proven to be tubercular in nature. In both of the latter diseases the blood will be found to be approximately normal, at least in respect to the white blood cells. Acute cases of leukaemia have been mistaken for noma, malignant disease of the tonsil, tongue, etc., and uselessly operated upon, when an examination of the blood would have made positive the diagnosis.

Myeloid leukaemia is defined as a hyperplasia of the myeloblastic tissue in the bone marrow and spleen, with the appearance in the blood of excessive numbers of ripe and unripe forms of the polynuclear cells. The disease is always chronic lasting from 5 to 10 years with but few symptoms beyond the blood itself and the hyperplasia of the spleen and of the bone marrow which usually causes some pain and tenderness in bones situated superficially like the sternum and tibia. The lymphatic system remains normal. Blood count reveals from 100,000 to 500,000 leukocytes to the cubic millimeter, the increase being due entirely to vast numbers of polynuclear cells, neutrophilic and eosinophilic in character and to the presence in great numbers of the unripe forms of these cells, the myelocytes which may be

neutrophilic, tosinophilis, basophilic or Cornell Mueller in type.

Although the myeloblastic tissue lies, so to speak, side by side of the erythroblastic tissue in the bones we find in the early stages of the disease no anaemia or disturbance in the red cells. Forced treatment with arsenic or the X-rays will oftentimes cause a disappearance of almost every sign and symptom of this disease, but we find that after abandoning the treatment the disease begins to recur and soon presents itself in its same classical, unmistakable picture.

CONSERVATISM IN THE SURGICAL TREATMENT OF INJURIES TO THE EXTREMITIES, SUS- TAINED IN RAILWAY ACCIDENTS.*

By A. O. SISK, EARLINGTON.

There is no subject in the annals of surgery in which conservatism should be more strenuously practiced than in the surgical treatment of wounds sustained in railway accidents. I am speaking especially of severe contusions, compound fractures, compound comminuted fractures, compound comminuted fractures with dislocation, and such injuries as may or may not necessitate amputation.

There is a great temptation to amputate many times, whether it be a finger or toe, an arm or thigh. This arises from the fact that the injury to the part is so extensive in consequence of the great force usually encountered in railway accidents. In addition to all the more common injuries such accidents not unusually produce injuries rarely met with from other causes. Hence when we look upon these wounds, presenting as they do such ghastly appearances, our first impulse is to amputate for several reasons:—It may seem to be the quickest way out of the difficulty, it may be least trouble to us, and it may mean less suffering to the patient. It is a worrisome proposition for the surgeon if he tries to save a limb, be it so small as a finger or so great as a thigh, for the anxious family and friends of the patient are observing from day to day the steady progress of suppuration and as they watch hourly for blood poisoning to set in, ask us many questions which we cannot answer (as you all know the laity can ask the doctor questions he can never answer because they are unanswerable). It is not only the quickest way out, but it appears to be the safest, for by amputating we

* Read before the 1906 meeting of the Kentucky State Association of R. R. Surgeons, Richmond.

get rid of all bruised and torn tissues. Small fragments of bone are taken away and all bleeding vessels are ligated; in short we have converted a very complicated wound into a simple stump. By so doing we have observed the principles of asepsis, and have avoided a wound which may be contaminated with germs of all kinds. Therefore, I say that for these reasons one is always tempted to amputate. But this was practiced by our forefathers in years gone by, when knowledge of anatomy, physiology and pathology was more limited than at present. H. D. Niler, of Salt Lake City, in his address on Twentieth Century Surgical Problems, which was published in the *Journal of the American Medical Association* of April 14th, correctly said:—"It seems to be the tendency of modern surgery to magnify the importance of manners and methods and at times to forget that all our real advances and most substantial achievements depend now, as always, not on our inventing or blindly imitating new plans of procedure, but on our alertness in diagnosis and our faithful allegiance to sound surgical principles as they are gradually developed from our growing knowledge of anatomy, physiology, and pathology." As this is true in surgery of other parts of the body, so it is true in a high degree in the surgical treatment of severe wounds of the extremities. Therefore we should exercise sound judgment in determining the anatomical changes, physiological interferences and the true pathological condition of parts injured, and consider well, before we remove a member which when once taken away can never be restored.

Our paramount duty as conscientious surgeons, first, last and always, is to the patient. We should of course always look to the safety of his life, for to him life is dear. On him some one may be depending for maintenance, he may complete the circle round the hearthstone of a happy home. But it is for these reasons that we should be conservative in our treatment of their wounds. For every inch taken away from the extremity of a laboring man, diminishes his usefulness. Then if upon him some one is dependent, we should use every effort to save the injured member. If not in whole, then in part. For to him usefulness should come first, cosmetics next.

Our duty to the railroad company is of course in common to our duty to the patient, for when we protect the life and limb of the patient, we protect the company in a financial way. Every life lost may mean the loss of thousands of dollars to the company. Every life saved or limb, or part of limb restor-

ed lessens their liability. We are employed by them and paid a liberal fee for services rendered. Besides this being done for humanity's sake, it is done for their protection. And it is to their interest that we restore an injured limb to as near normal as is possible. We should not be too ready to come to the conclusion that the member should come off. But we should consider well, the amount of injury done, and then by careful deliberation and the application of our better judgment, endeavor to save every particle of tissue we can. When we can do this, we shall have performed our duty equally to the patient and to the company.

In the treatment of wounds sustained in railway accidents we should also give due consideration to the legal aspect of same. It is from a legal standpoint that we are employed by the various railroad companies. We are, so to speak, safety valves for them. Public sentiment seems to be against them and does not always give them a fair deal. When a man is injured while in their employ, whether or not it be the fault of the railway company, he usually expects an indemnity. If this is not allowed, or he does not get what he wants, the next thing is to bring suit against the company. There are persons who call themselves lawyers, make it their business to hunt down men who have sustained injuries on the road, try to prejudice their minds and persuade them to bring suit. They usually succeed thus far, but ere long the case slips from the so-called lawyer's hands and is taken up by a competent attorney. Then we are called on to testify in court in behalf of the company. It is expected of us to make a good and impressive witness. If we do, we must have given the injury the very best treatment and attention possible, and practiced conservatism to its fullest meaning. We should keep a full report of the extent of injury, note the progress of repair, etc., so that when called on we may make the very best impression as a witness. We need only to mention what a different effect it would have on a jury to exhibit a limb saved by conservative treatment or to exhibit a stump showing the sacrifice of a limb.

As a plea for conservatism, no better illustration can be given than one shown by Scudder in his book on fractures. On page 242 of his latest edition is shown an illustration of a compound fracture and dislocation at the wrist. Hand was saved. At a glance it would seem impossible to save the hand. Just such injuries are a common occurrence in railway accidents.

I recently discharged a case after a long

fight with suppuration and necrosis of bone. It was a compound comminuted fracture and dislocation at the elbow, in which the ligamentous attachments were almost completely severed, the head of the radius was broken and completely freed from all attachments; the ulna and radius were spread apart and driven up past the lower extremity of the humerus, chips off the condyle and other small fragments of bone were lying loose around the joint and the soft parts were severely contused and lacerated. The patient was brought to me at night immediately after having been thrown from a moving "gon." It is supposed that when he fell the wheel or oil box struck his arm, inflicting the wound. We proceeded to prepare the arm as if for amputation. Removed the head of the radius and all other loose fragments of bone. Found that the radial recurrent artery was the only bloodvessel injured of any note, reduced the dislocation on the ulna side and then irrigated the wound with an antiseptic solution and placed a rubber drainage through the arm, and closed the wound except for the drainage. We then put on a plaster dressing the same as for resection at elbow joint, with the arm in position as it would hang naturally by the side. The after treatment was,—the irrigation method and antiseptic dressings using plenty of gauze and cotton. There was considerable suppuration and several pieces of necrosed bone were removed from time to time, but to-day the man has his arm and except for the ankylosis at the elbow joint he will have good use of his forearm and hand. I mention this case because the question of amputating his arm above the elbow was seriously discussed. Another man who was a brakeman at the time of the accident, but now a conductor, sustained a severe wound of the foot. One or two of the bones of the foot were fractured, and on account of the amount of contusion, etc., his physician, who was a railway surgeon, advised amputation and insisted that there was but one chance in a hundred to save the foot. The patient declared that he would take that one chance and risk the consequences. The result is, to-day, a foot, sound and well and with the exception of being minus one toe the foot is as good as the one uninjured. This is a case, not my own, but one I am personally acquainted with, having been called in to assist in the amputation.

Thus we may often misapply our judgment and fail to make the best impressions as surgeons. Since the perfection of surgical technique and the introduction of the principles

of asepsis and antisepsis, we are better enabled to practice conservatism.

There are a great percentage of amputations, that could, by conservative treatment and by the application of modern surgical principles be avoided. Conservatism is the cry of our most eminent surgeons to-day. We can scarcely pick up a book on surgery, or a surgical journal but that we find it advocated. Now if there be a percentage of cases lost that could be saved by careful deliberation on our part as surgeons, it is not well that we consider seriously, the method of treatment of wounds to the extremities?

PROPHYLAXIS IN GYNECOLOGY.*

BY T. C. HOLLOWAY, LEXINGTON.

"Preventive medicine is the medicine of the future and the final triumph of scientific medicine will be the suppression of disease." These words spoken recently by the brilliant and versatile Dr. Nicholas Senn in a lecture before the Medical Association of Alabama, may be said to be quite characteristic of the spirit of the age in which we live. It is toward just this final triumph of scientific medicine that every true physician is striving, and it is well that we should find encouragement and inspiration in a recital of the great victories already won.

When we think of what has been accomplished in the prevention of smallpox, hydrophobia, wound infection, puerperal sepsis, tetanus, malarial fever, typhoid fever, cholera, yellow fever, and bubonic plague we are impressed with the magnitude of the service thus rendered humanity. The names of such men as Jenner, and Pasteur and Lister and Koch and Walter Reed and others of those who have placed the world so greatly in their debt by their work in combating these diseases, have been accorded an honored place among the world's immortals. Dr. Senn says of Pasteur and Lister that they have conferred a greater benefit upon the human race than any other two mortals in the history of the world.

But great as the achievements of scientific medicine have been in preventing disease, how much yet remains to be accomplished! To our credit be it said we are actively engaged just now in a great conflict with tuberculosis and cancer, two powerful enemies of our race, that as yet have baffled human skill—a conflict which commands not only our keenest interest but all the aid that we may individually render. But aside from these two dread maladies we are daily

* Read before the Fayette County Medical Society June 18, 1907.

brought to witness a vast amount of human suffering which we know full well to be due, in a large measure to preventable causes. We shall fail of our opportunity and our duty if we neglect to bring the fundamental principles of prophylaxis to bear upon these common conditions with which we daily have to deal. With this thought in mind I desire to direct your attention to some common gynecological conditions to which the principles of preventative medicine may be applied.

In the minds of many people the gynecologist is a much dreaded individual who possesses a variable amount of skill in performing certain terrible and mutilating operations upon women, requiring the sacrifice of one or both ovaries, if not the womb itself, who is continually in search of tumors or growths or other things equally unpleasant, and whose services are to be sought only as a last resort. The idea erroneous though it may be, is faithfully fostered by the venders of quack female remedies and by the agents and victims of such fake schemes as the "viavi treatment." But it doubtless has some foundation in the fact that all too frequently the attending physician fails to find anything seriously wrong and continues to treat the sufferer from "female trouble" as a sort of chronic complainer, takes refuge in a diagnosis of hysteria, and prescribes a "tonic," until matters have drifted into such a wretched state, that an operation alone offers hope of relief. For the sake of those already in this unhappy condition, it is well indeed that the science and art of gynecology with all its modern advancement, can offer so much but from the standpoint of the general practitioner upon whom the greater part of the burden in the matter must fall, what can be done to prevent this necessity?

There is in this and doubtless every other community in our land a small army of semi-invalids, whose health and happiness and usefulness depend very largely upon the answer to this question. By reason of their peculiar duties and responsibilities they form a most important element in society; but by reason of certain peculiar maladies which are only too common they are rendered physically, mentally, and often morally unfit for any proper discharge of these duties.

I refer to that large number of women, who during the reproductive period of their lives, when the demands upon their strength are greatest, find themselves reduced to a state of semi-invalidism, or worse, by reason of some disorder of the reproductive organs.

They are as a class miserable and unhappy. Household duties become irksome and the proper care and training of little children almost impossible. The evils direct and indirect which result can only be imagined. As a class they present many symptoms in common. They inform you that they have "female trouble"—have had it for years—have taken Wine of Cardui, Pierce's Favorite Prescription or Lydia Pinkham's Compound or the Viavi Treatment without avail; they have a leucorrheal discharge, some disturbance of menstrual function, habitual constipation, are inclined to be nervous and have pain—a great deal of pain—pain in the back, pain in the legs, pain in the region of the ovaries, and pain anywhere and everywhere else. They do not know exactly what the trouble is and you are fortunate if you are able to ascertain. They have lost confidence in drugs, pardonably so, and their confidence in Doctors is fast disappearing—necessarily so.

When operated upon the result is often anything but brilliant, and frequently proves embarrassing to the operator and unsatisfactory to the patient. Of course the patient has become a "neurasthnic,"—most anyone would be, but in the large majority of cases this is but an addition to her other misfortunes and not by any means her fault. If carefully analyzed there exists a pathological condition or several of them which are due to preventable causes, and in view of the unfavorable prognosis under the various methods of treatment which are open to us, it becomes interesting to consider prophylaxis.

Ashton has classified the causes producing diseases peculiar to women under twelve headings, of which seven should clearly be classed as preventable. These seven, including practically all of the most common causes of gynecological conditions, are designated as follows:

1. Education, 2. unhygienic conditions, 3. sexual relations, 4. venereal diseases, 5. childbirth, 6. criminal abortions, 7. accidental infections and traumatisms. The remaining five which are mentioned here to complete his classification are anatomic causes, hereditary and congenital causes, civilization, social conditions and the different periods of life. While much may be done to modify the effects of these last mentioned causes, they are for the most part beyond our control. Fortunately they play a comparatively unimportant part in producing the semi-invalidism to which I have referred.

Taking Ashton's classification as a convenient subdivision of the subject, let us see

how much may be done to avoid the unhappy effects produced by these preventable causes:

1. Education: It is important that prophylactic treatment should have its beginning in childhood for it is in this period of development that the foundation is often laid for future years of misery. We have heard much of the sad effects of our present system of education upon the general and sexual strength of our women. The over-stimulation and development of the mental at the expense of the physical nature has doubtless been attended by serious injury in many cases. Particularly is this true when young girls are allowed to spend long hours of study in crowded and poorly ventilated class rooms, with little or no regard for those times when special care and attention is needed, as at puberty and during the menstrual periods: Goodell thus forcibly expresses his views upon the subject:

"In one word it is to the present cramming and high pressure system of education together with its environment that I attribute much of the menstrual derangements of our women the absence of sexual feeling, the aversion to maternity, the too often lingering convalescence from the first labor which is frequently the only one, and the very common inability to suckle their offspring. From this cause come most of my unmarried patients with nerve prostration with their protean mimicry of uterine symptoms—unmarried often because they are not well enough to wed. If woman is to be thus stunted and deformed to meet the ambitious intellectual demands of the day, if her health must be sacrificed upon the altar of her education, the time may come when to renew the worn out stock of this Republic it will be needful for our young men to make matrimonial incursions into lands where educational theories are unknown."

Such teaching has not been without effect. There has been observed a tendency of later years to correct some of these evils, and the athletic girl with her fondness for out-door sports, and her fearlessness of sunshine and fresh air has become not only more popular, but fortunately more numerous.

There is, however, one most important part of the education of the average girl which has been sadly neglected, and when we consider the fearful consequences of this neglect it seems almost criminal. Though careful and costly provision is made for instructing her concerning many things—some of them of little practical importance—the average girl is left in hopeless ignorance of the sacred and mysterious part of her nature which is des-

tined to raise her to the highest heaven of earthly happiness or to plunge her into the deepest hell. Surrounded by loving parents, and carefully selected teachers and attended by the family physician, whom we will suppose to be both faithful and competent, she is left all too often to learn the most momentous lessons of life in the hard school of experience, at what a terrible cost the gynecologist may well bear witness.

In view of the fact that many mothers fail to appreciate the importance of this question, and either through ignorance or a false sense of modesty, neglect to instruct their daughters with reference to the nature and proper care of the productive system and to warn them of those peculiar dangers to which they are sooner or later to be subjected, it becomes obligatory upon the family physician, who would do his full share in preventing disease, to instruct the mother—and if necessary, the daughter herself.

Without fear of contradiction it might be said that this instruction properly given and impressed upon the child's mind at or before puberty would be of far greater value to her in preventing the diseases to which she will be exposed than to vaccination, if such a choice were necessary. Vaccination will probably protect her from small-pox; the knowledge may save her from several things, any one of which would be vastly worse.

It is not a question as to whether the young girl should be told of such things; for it is absolutely certain, whether reared in a luxurious home and trained in exclusive boarding schools, or in the humble dwellings of the poor and compelled to engage in the fierce battle for existence, this knowledge will come to her and at a much earlier time in her life than most people realize. It is only a question as to how she shall be told—whether these great and important truths shall be imparted by mother and teacher and physician, or whether through the unpardonable silence of these her rightful instructors, the child should be left to gather a vulgar, distorted and misleading half-knowledge from foul and contaminated sources. In one of our leading magazines this subject is being discussed just now and the revelations that have come, as a result of the investigations,—of immorality and evil practices that exist in our schools of all classes, should cause all right minded people to stop and think, and should awaken the family physician to a realization of the large duty and responsibility which rests upon him in this matter.

In close relation with this subject is the question of child labor, a question which in the mind of every intelligent, thoughtful phy-

sician can have but one answer. In our own community the question has not yet assumed large proportions, but with the development of our tobacco stemming and manufacturing industries there will devolve upon us as physicians and no less as citizens the duty of seeing that wise child-labor laws are enacted, and enforced here in Lexington and that every means of protection shall be afforded the large number of women and young girls that will be employed.

Unhygienic conditions: This term seems rather broad and general. Whatever tends to lower the vitality and unfavorably affect the general health would increase the liability to disorders of the reproductive system and conversely, good hygienic conditions would tend to prevent them. One or two points, however are deemed worthy of special emphasis in this connection. We should all be faithful ministers of the great gospel of cleanliness, but our failure to properly appreciate the bearing of general and local cleanliness upon some common gynecological conditions has made millionaires of the too thrifty, though unscrupulous young men who did, and therefore invented "Viava"—which depends largely upon the virtue of the cleansing vaginal douche.

Constipation in many cases, especially among women, should not be considered a disease or a symptom of disease, but merely a matter of bad hygiene—of almost unpardonable uncleanness—which may become a cause of serious trouble. It is due very often to positive neglect, it is aggravated by improper diet, insufficient ingestion of water, lack of exercise in the open air, and irregularity at the time of going to stool. Careful attention to these things in the absence of actual pathological conditions, will usually result in a cure and will prevent those annoying symptoms which invariably accompany the condition. Imprudence at the menstrual period, is a frequent, but clearly preventable cause of "female trouble." Indiscretions as to exercise, food, dress, and insufficient rest and sleep, are all important causes of diseases peculiar to women, which under the careful and specific direction of the physician may be avoided.

Sexual relations: Since we find that in many casts a serious pelvic trouble has resulted from errors in connection with sexual intercourse it becomes the duty of the careful physician to inquire diligently into this matter when occasion may require and by giving necessary instruction and advice enable his patient to avoid this very prolific cause of pelvic trouble. It is a singular fact that in all species of the lower animals, instinct alone

prevents the excesses and abuses which are so common among human beings, and so injurious in their effects.

Venereal disease: It is not possible in this paper, with the time at my disposal to discuss this phase of the subject as fully as its importance warrants. It is above all others, with a possible single exception, the most common cause of these distressing gynecological conditions requiring operative interference. Gonorrhoeal infection is responsible according to our best authorities, for a large percentage of all cases of pyosalpinx. A pitiable feature of this very common condition, which is so distressing in its final results, is that the woman is frequently the innocent victim of her husband's indiscretions before marriage or his infidelity afterward. Surely much may be done by the physician to prevent such calamities. The young man who has contracted his first case of gonorrhoea should be invariably warned of such possibility, and proper care and treatment of this disease should be insisted upon for this reason, if for no other.

Again if the possibility is borne in mind and a careful history obtained from the patient herself or the husband if necessary, aided by the microscopic examination of all purulent discharges from any part of the genito-urinary tract as a routine practice, many cases of gonorrhoeal infection may be arrested before the disease has involved the Fallopian tubes, and thus a large part of the direful consequences of this preventable cause be avoided.

Child-birth: It is to the credit of our modern aseptic midwifery that puerperal sepsis, once so common, and when not immediately fatal leaving in its wake such a distressing aftermath of gynecological conditions, has been relegated to the past and is now so rare as to be regarded an accident. The fact remains, however, that we have among our army of semi-invalids a large number whose troubles are traceable directly to preventable causes associated with child-birth. Lacerations of the cervix and of the perineum may not always be avoided, but the proper and timely repair of these injuries makes all the difference in many cases between a strong, well, happy mother and a most miserable semi-invalid. Imprudence on the part of the woman herself during the first week or two following a successful and uncomplicated labor often results in subinvolution of the uterus, misplacement or prolapse of pelvic organs, and lays the foundation for weeks or months or even years of ill health to follow. The physician who would save his patient from the gynecologist must therefore give proper attention

to the care and after-treatment of obstetrical cases.

Criminal Abortions: This not infrequent cause of serious and even fatal disease is perhaps improperly referred to as preventable. In spite of our rigid laws and of the severe punishment which they provide for this class of criminals, the evil work still goes on, filling untimely graves with its wretched victims drawn from all classes and conditions of life, or casting them forth upon a heartless uncharitable world to suffer a sort of living death. The criminal abortionist undertakes a difficult and delicate task which must be performed amid most unfavorable surroundings, without competent assistants and without any of the advantage which a well directed hospital affords. It is small wonder that as a rule he makes a bad job of it. The danger from which his victim in terror flies is not one-half so great as that to which this conscienceless criminal wilfully exposes her if she but knew. He is a dangerous element in any society and the earnest and united efforts of physicians should ever be directed to his suppression.

Accidental infections and traumatisms: In these days of aseptic midwifery and of asepsis in the examination and treatment of all cases where the possibility of infection exists, gynecological conditions traceable to dirty instruments or unclean fingers of the physician are far less common than formerly; but it seems worth while to emphasize the importance of eternal vigilance in this matter.

Thus we see that our army of semi-invalids is made up largely of those who suffer from preventable diseases and that much may be done to apply the principles of preventive medicine to those common gynecological conditions.

DISCUSSION.

Discussion opened by Sam B. Marks. He said that the educational part of prophylaxis was neglected by physicians. He emphasized the importance of early repair of injuries received at child-birth. Operative treatment for displacement was advised as local and medical treatment is tedious and unsatisfactory. He also emphasized the importance of proper hygienic habits, etc.

J. A. Stucky: Much may be done to lessen the number of gynecological cases by proper prophylactic measures. Two points especially emphasized. 1. The sexual problem which is most important of the age. Very little is known about the subject and boys and girls should be instructed. 2. Criminal abortion. Doctors stand with tongues tied and hands tied and still know that this type of criminal is con-

stantly at work right here in Lexington. What will we do about it? It is up to the medical profession to stop it.

G. P. Sprague: Expresses the encouragement in considering the present status of medical education. Medical speakers are full of hope and are teaching preventive medicine. They get away from empiricism with difficulty, but no longer depend upon drugs alone. Doctors are becoming sanitarians and public health care-takers. This shows healthy growth.

F. H. Clark: Thought that the medical phase of schools and colleges is not yet studied as it should be. Trouble begins early in poorly ventilated school rooms. Except at certain critical times in her life woman should be able to do as much mental and physical work as man. "Anything unscientific is immoral," this is true in religion, in education, in medicine and in other things. The doctor should be a teacher. Medical inspection of schools and colleges should be enforced not only as to maintain sanitation but as to scientific control of school work in all of its departments.

Dr. Simmons: Referred to the question of criminal abortion, and stated that many of the cases reported as "still-born" are abortion cases.

Dr. VanMeter: Heartily indorsed the paper, emphasized the importance of the doctor becoming a teacher of prophylaxis. The public platform does not afford the opportunity for instructing the public which the physician has in his own office: he should impart a little more knowledge and give a little less physic. Every patient suffering with gonorrhea should be impressed with the serious nature of his condition. Maximum stress should be placed upon heredity. Many gynecological invalids are hysterical by heredity.

B. N. Coleman: Young girls should be instructed to take especial care during menstrual periods. The two great causes of gynecological conditions are first, gonorrhea; second, improper care at child-birth. The parturient woman should be kept in bed for at least ten days to two weeks; should be carefully examined at the end of two weeks for subinvolution or displacement, if found postural and manipulative treatment should be instituted and kept up, if necessary for three or four months.

Dr. Coyle: We should educate both the boy and the girl particularly with reference to masturbation. The school girl should be carefully watched as to condition of health. If menses cease she should stop school until the trouble is overcome. Young men infected with gonorrhea should be advised against marriage.

Dr. Willis: It is surprising how many good women favor abortion. They not only produce it

upon themselves but think there is no harm in it. They should be educated as to the moral and physical and sociological questions involved.

SUMMER DIARRHOEA.*

By J. F. YOUNG, MENT|CELLO.

This is an acute gastro-intestinal disturbance in children in the hot seasons of the year. The focus of the disturbance may be at any part of the intestinal tract. It is hardly possible for the physician to classify all these disorders on the basis of pathologic lesions. This can only be done by post mortem examinations when the physician's services are no longer solicited. Then you will not be able at all times to say this child has duodenitis, colitis and proctitis or this is functional, catarrhal, irritative, toxic, infectious, follicular, ulcerative, or membranous; beautiful and high-sounding adjectives to cover up our ignorance without acknowledging that we cannot make a diagnosis.

So I will not classify all these disorders, but investigate in a general way a class of cases frequently met with in mid-summer and early fall.

Perhaps no other disease will have our attention more for the next few weeks than diarrhoea in some form; and especially that class of cases which is due to high temperature and improper feeding or to toxins introduced into the stomach from without.

It is a disease we find in all conditions of life, among the rich and among the poor. It is a most formidable foe to the human family in the larger cities, in the tropics, and especially is this true among children, where the mortality is very high. It not only exists as a specific disease both in the acute and chronic form, but is afterwards found as a complication in many of the conditions the physician meets on his daily rounds.

An attack may begin very abruptly and terminate in a few hours or days at most, in complete recovery with little or no treatment or it may stealthily and slowly develop into a dangerous disease and if not promptly met and subdued may exhaust the vitality and destroy the life.

If possible, diagnose and name each case. Because a correct understanding of the particular part of the bowel, which is affected, and the cause of the diarrhoea, give name for the disease as well as a key to the situation for treatment. Second, to be specific and name the trouble establishes confidence

and materially aids in carrying out a plan of treatment.

There are some general symptoms which we find in all cases. First, increased secretions and persistalsis with frequent evacuations. Second, uneasiness and irritability with some pain. Third, diminished appetite with nausea and vomiting.

Any one of these or all of them may be greatly increased or intensified as the diarrhoea assumes a particular form as some special characteristic is developed; or to state more definitely these symptoms are suppressed or exaggerated as a particular part of the intestines becomes the seat of the disease as catarrhal poison.

Those who have studied the pathological anatomy of these cases in the dead house tell us that in the beginning of the attack the mucous membrane becomes red, that there is some swelling and oedema; that this is usually most pronounced about the glands, though it may be diffused over all the surface of the part attacked or it may be in patches and restricted to a particular locality. If this process of engorgement is intensified the capillaries will be ruptured, increased secretion and exudation occurs. Products of the glands are thrown off. Desquamating epithelium, proliferating cells and migrating white corpuseles will be found.

Under good hygienic influence, correct diet and proper treatment all the symptoms may subside in a day or two or a week at most, but if we do not succeed in removing the cause and overcoming the inflammatory process, it may become a chronic diarrhoea. Then the long continued hyperaemia brings on changes in the vessels of the walls of the intestines. They remain overdistended and large. The veins become tortuous and varicose. The mucous membrane continues swollen and oedematous. The glands become permanently enlarged or it may extend to all the muscular walls and hypertrophy takes place and encroaches on the cavity, thereby reducing the capacity of the bowel.

There are three great factors which precipitate this trouble. If they are not the direct cause they participate to a very great extent in bringing on the trouble. The most important of these three causes is the high temperature; under climatic influences we find that the intense heat of the summer months and early fall bring on many cases. High temperature depresses the vital forces and relaxes the muscular tone, diminishes the quality of the digestive ferments and enfeebles the appetite, thereby diminishing the

* Read before the Wayne County Medical Society, June 4, 1907.

resisting power of the system. As the resisting power has been reduced and digestion has been impaired we have a condition, whereby an attack may be precipitated by improper feeding. Then I would make improper feeding the second great cause in producing diarrhoea. The third factor is bad hygienic surroundings, such as damp, ill ventilated places. Locations where the air is contaminated by cesspools or close proximity to decaying vegetable and animal matter. These three factors combined may precipitate an attack in children at any time, varying in intensity from a slight diarrhoea to a fatal acute enteritis or in the adult from a few loose stools to a most severe and alarming case.

Bacteria play an important role in all these cases whether they enter the intestine tract with the food and drink or inhabit the intestine. When an abnormal condition exists they swarm in great numbers. The bacteria or the product of their growth as the toxin produced by their presence will pass through the mucous membranes since it is exoriated or denuded of its epithelial layer of cells and enter the blood and produce high fever and symptoms of profound poison. This element must be reckoned with in treatment.

Before we decide on a plan of treatment it is necessary for us to fully understand that the chemical condition existing in the intestinal tract in the normal state of health differ materially from those which are liable to exist in a deranged condition. In the normal condition the intestines are alkaline and a thorough and proper digestion can only take place in an alkaline medium. When we have a case of fermentation and indigestion bringing on an attack of diarrhoea it is evident that the alkalinity of the bowels has been destroyed. Then an acid condition must exist. (This can readily be verified by litmus paper). With these facts well before our mind it is evident that the treatment must be directed to counteract the existing unnatural condition and to restore the normal state. To do this we must restore the alkalinity, rid the bowels of all undigested particles of food which are fermented, restore the tone of the bowels and allay the irritability. Much may be done to relieve this class of cases. We should promptly relieve the pain and distress, and to do this some form of opium may be used. From the mildest case to the most severe, opium in some form may be used to advantage; If it be an adult I would inject morphine. If it be a child too young to tell of the intense suffering, there is no reason why you should

withhold the anodyne. I would not give the child under a year old opium or morphine, but one of the milder preparations or a derivative. When you have given relief opium is contraindicated and I do not recommend its continued use. Wash the bowels out with warm water, remove every particle of undigested and fermented food. Full dose of castor oil may now be given or calomel, ipecac and bicarbonate of sodium every hour till effect is noted. This will allay the nausea, clean the tongue and promote a healthy secretion. Give rhubarb and bicarbonate of potash after the bowels have acted from the calomel. Follow this with salol, subcarbonate of zinc, subnitrate of bismuth, subcarbonate, or subgallate of bismuth, hydrastis and the digestive ferments.

Place the patient under good hygienic surroundings, in a cool room free from noise, where the air is fresh and pure and sweet. Enforce perfect quiet.

From the beginning what to feed is a most perplexing problem. I would recommend, that in most all of these cases in children, forbid the use of all food for the first twenty-four hours. Then give the white of an egg in half glass of pure water every three hours to a child three years old. Use no other food for some days or at most till the bowels have been thoroughly freed of all fermented and undigested food, until alkalinity has been restored and nausea has been allayed. Under this plan of treatment if the patient does not get well in from three to five days it may last many weeks. Direct the treatment now to remove the cause, to counteract the effect and to maintain the strength. Vomiting, fever and diarrhoea may persist. We now have the dry mouth, pallid skin, pinched features and hollow orbit. Bacteria now play an important role regardless of the primary cause, they rapidly multiply under the condition rendered favorable by indigestion. They find their way through the mucosa into the blood and produce symptoms of profound poison and dangerous complications in remote organs. Nutrition may now be administered by rectum after the bowels have been flushed with warm water, to which, boracic acid has been added or bicarbonate of sodium. Boiled starch may be used. Oatmeal gruel thoroughly cooked or gruel from some of the cereals can now be given. Meat juice may be added for older children. Boiled rice and baked potatoes will agree with some. Fruits and vegetables as a rule should not be given. I would recommend strychnine and brandy to maintain the strength. Fev-

er should be looked after from the beginning. Sponge with tepid water. Use antipyretics with great care. If the fever is high veratrum or aconite may be used. Always be very careful in your prognosis.

COUNTY SOCIETY REPORTS.

Anderson—The Anderson County Medical Society met on the first of July with Dr. Crume, at Fox Creek. Dr. Toll read an excellent paper on infantile diarrhoea. He laid great stress on cleanliness and fresh air in prophylaxis and treatment. He said that no child would remain healthy fed on cow's milk alone and that the routine practice of diluting the cow's milk with water was unscientific. The proper method being to ascertain the exact differences between the cow's milk and mother's milk and then supply the necessary ingredients to the cow's milk. Don't use nipples or tin cups but use a glass in feeding milk to the child.

Dr. Paynter opened the discussion. He said that teething was often the cause of diarrhoea in children, also indiscretion of mother during nursing period, becoming overheated, angry, etc.

Dr. Davis said he used very little artificial food but depended on cow's milk.

Dr. Crume said that hygiene was important, also use milk from one cow, strict antiseptic precautions, lime water, and flush colon with hot water and glycothymoline. He said that "Aunt Sally" and "Cousin Betsy" played havoc with their "dog-fennel" tea, etc. Milk should not come in contact with tea.

Dr. Lillard: Starvation for 24 to 48 hours essential more than medicine. Give large doses of bismuth.

Dr. Milton: Starvation important. Don't feed milk out of bottles or tinware. He advocates use of milk from several cows. He uses ipecac for vomiting; calomel in the dysenteric form, and colcyntin for colic.

Dr. Murdock said that he had found peptogenic food best of artificial food.

Dr. Kavanaugh complimented paper as being thorough, and said that nothing taxes the resources of the physicians so much as this trouble, it being very hard to get the recognized treatment carried out properly outside of a hospital.

Dr. Toll in closing said that his paper was intended to especially emphasize the point "to find out what the baby needed in the way of food and supply their wants.

Dr. Crume presented a child to the society eighteen months old suffering from chronic anterior poliomyelitis. Various opinions were given as to the cause of this trouble. Dr. Kavanaugh, who first saw the case said it was a typical case of anterior poliomyelitis caused by la-

grippe. Some expressed the opinion that injury at birth had caused the trouble, others thought it was caries of cervical vertebra; and one expressed the opinion that the sole cause was adherent prepuce, and that circumcision would relieve the trouble.

Dr. Kavanaugh said that there had been no injury at birth nor since; and that prepuce was not adherent. Improvement had been satisfactory of late, and ultimate recovery was hoped for.

Motion made by Dr. Murdock and passed that a certain journal in Louisville be asked to quit advertising antikamnia.

The society adjourned to meet with Dr. Murdock at Alton, on August 5th.

J. W. GILBERT, Secretary.

Ballard, Carlisle and Hickman Joint Session.

—The Ballard, Carlisle and Hickman County Medical Societies met in joint session, June 26th and 27th, 1907 at Holt's Bridge on Obion Creek. The session was presided over by Wm. Graves, president of Carlisle County Medical Society and was called to order at 10 A. M. of the 26th when a very interesting paper was produced by R. T. Hoeker, of Arlington, on the subject of typhoid fever.

The discussion was opened by W. T. Berry, of Clinton, followed by W. R. Moss, W. L. Mosby, J. M. Peck, E. B. Shelton, R. C. Burrow, R. S. Killough, F. N. Simpson, and H. T. Crouch. When the afternoon session was called to order at 1:30 P. M. the society was treated to another excellent paper by W. R. Moss on "Puerperal Fever," which contained some valuable ideas with regard to prevention of this condition.

The discussion opened by E. B. Shelton, and followed by W. L. Mosby, C. E. Purcell, R. S. Killough, H. T. Crouch, J. M. Peck, and R. T. Hoeker was instructive and very interesting.

President Graves called the evening session to order at 8 P. M. The subject for the evening's work was a good paper prepared by H. T. Crouch, on "A Better System of Finance." This paper was well and carefully prepared, and, as is indicated by the title, and the prevailing conditions here, the paper advocated the necessity of physicians being better paid. This paper was discussed by R. S. Killough, J. M. Peck, E. B. Shelton, and W. L. Mosby, and served to emphasize the fact that doctors as a rule are under paid, by reason of fees generally, being too low, "dead beats" walking off leaving their bills unpaid, the doctors themselves carrying the burden of the pauper practice instead of the county paying for it, at the same rate other citizens should pay for service. A motion was made, seconded and carried that the president appoint a committee of three from each of the three counties, to confer, and arrange a schedule of

fees to be submitted to each county at their next regular meetings.

The morning's session of the 27th was called to order at 9:15. A report was heard from H. T. Crouch, chairman of the committee on "Schedule of Fees," which report was received and committee discharged. The program was then taken up and the society enjoyed the reading of a paper, "The Radical Treatment of Hemorrhoids" by H. R. Melton. Discussion was opened by W. Z. Jackson, and J. M. Peck, W. L. Mosby, W. R. Moss, R. T. Hocker, Geo. W. Payne, H. T. Crouch followed.

W. F. Stevens, of Lacenter being unable to attend, mailed the society his paper, "Scarlet Fever and Its Complications," which was a good one, and was presented by E. B. Shelton and discussed by most every one present.

Carlisle County Medical Society will meet at Cunningham Tuesday, September 3rd, 1907.

W. E. GHOLSON, Secretary.

Christian.—The Christian County Medical Society met at 11 A. M. in the City Court room with President Stone in the chair. Those present were:—Drs. Caudle, Harned, Erklitlian, Wright, Grace, Stone, Keith, Blakey, Thomas, Anderson, Rice, Petrie, Reynolds, Stites, Bell, Woodard, Harris, Ketchum, Dennis, Bacon, Edwards, and J. Y. Welborn, of Evansville. Dr. Erklitlian favored the body, at the morning session, with a delightful paper on "Patent Medicine," which was enthusiastically discussed by every member present.

The afternoon session was one of very great interest and was largely attended. At this meeting Dr. Welborn read a very carefully prepared paper on "Diphtheria," as it has been in Evansville since 1886. Among many other momentous things which the doctor said was that an early diagnosis, as well as an early administration of antitoxin with the high units was very important, and that it had no bad effect on the patient. The doctor also recommended antitoxin in membranous croup. The discussion, which was led by Dr. Stites, was liberal in the extreme, almost every point of importance on the subject being brought out and discussed at length. The society closed with a vote of thanks to Dr. Welborn for his most excellent paper.

A. H. EDWARDS, Secretary.

Fayette.—The Fayette County Medical Society held its June meeting on the 18th, Dr. Barkley in the chair. F. P. Perkins made application to the society for membership. His application was turned over to the Board of Censors. Dr. Sprague read the enclosed resolutions, which were unanimously adopted by the society. Dr. Stucky and Vanmeter made very interesting talks, reporting their work at Atlantic City. T.

C. Holloway read a paper on "Prophylaxis in Gynecology" (printed elsewhere in this issue). The paper was discussed by Drs. Stucky, Clarke, Sprague, Vanmeter, Coleman, Macky, Barkley, Willis, and Holloway.

Resolutions.—The Fayette County Medical Society recognizes that bovine tuberculosis can be transmitted to man; that tuberculous meat and milk are dangerous when used as food, and that the use of tuberculin furnishes an almost infallible test for tuberculosis in cattle, therefore,

Resolved, That all dairy herds, and all slaughtered meats in the State of Kentucky should be tested by an official inspector; that the tuberculin test should be under a State law—applied to every bovine animal within the State at stated intervals; that each such animal reacting to it should be killed, and its owner reimbursed from the State Treasury to the amount of 3-4 of its intrinsic value. It is further resolved that for the better protection of the public health, veterinarians should be obliged to pass an examination before a state licensing board and be allowed to practice their profession in Kentucky only under a diploma from such board.

G. P. SPRAGUE,

F. H. CLARKE,

J. C. CARRICK,

Committee.

R. JULIAN ESTILL, Secretary.

Henderson.—The regular semi-annual all-day meeting of the Henderson County Medical Society was held in the council chamber, Henderson, Monday, May 27. Meeting called to order by President Forwood at 10 A. M. The following members were present:—E. N. Powell, Royster, Forwood, Quinn, Moss, Hanna, Hancock, Dunn, Poole, Moseley, Dixon, Galloway, Stone, Graham, Bethel, and Griffin. The minutes of the preceding meeting were read and approved. There being no clinical cases, the regular program as arranged was taken up. Dr. Forwood read a paper on "Alcoholism," discussing the acute and chronic variety. The essayist claims that alcoholism and tuberculosis are closely related, in so far as the use of the former, so lowers vitality and the resistance of the tissues, that the germ finds easy access; that alcohol is not a food; that it is not a heart stimulant and should be considered the heart's worst enemy.

Discussion: Dr. Dixon. — Several conditions are produced by alcoholism. The convivial drinker is not so serious as the periodic drinker or inebriate. There is a vast difference in the two, one is an acquired habit; the other is the subject of a disease of the most grave kind, deserving the serious attention. I would suggest farms, or something similar, where they could be under surveillance and be employed in suitable ways.

Dr. Hanna.—The individual afflicted is not the greatest sufferer—he is a bad citizen, often a murderer, entailing hereditary taint on the offspring. His will-power is gone, consequently he should be looked after by the State. Alcohol as a therapeutic agent is vastly different now from that of the past. Formerly large amounts were given in the acute infections, pneumonia, typhoid fever, etc. The trend of opinion in America is against the use of the drug. The duty of the profession is imperative in educating the public in the baneful influences of the drug. There is a striking difference in the offspring of the alcoholic, and non-alcoholic.

Dr. Stone.—I was not clear on the industrial and convivial aspect, the social contingent is even more susceptible than the industrial. My stand was outlined in the meeting of the Ohio Valley Medical Association in establishing industrial homes, also the liquor business should be taxed to support them. The alcoholic should not be incarcerated in jails, etc., but should be placed in sanitariums and forced to remain there until cured. The evil of this thing is menacing the national welfare; all nations are getting agitated over this subject, it is greatly restricted in this State.

Dr. Forwood.—I thank the members for this discussion. Preventive and educational measures are most important; physicians should disseminate the knowledge.

Dr. Moss read an excellent paper on "Diabetes Mellitus," after defining gave the following as a clinical picture:—Thirst, loss of weight, weakness, frequent micturition, boils, carbuncles, lowered temperature, gastric disturbances, and gangrene. While all cases do not necessarily fit this picture, many of them do. The cause of glycosuria discussed and still unsettled. He gave a good exposition of the management.

Dr. Dixon, in discussion, said: "Management of Diabetes Mellitus sometimes is very difficult, but diagnosis easy — question of etiology still in doubt. Forms—Composite form is the gravest, for diet and withdrawal of carbo-hydrates has very little effect on the amount of sugar in the urine. Diet is the most important in line of treatment."

Dr. Moseley.—I question the advisability of absolutely withholding carbo-hydrates. Would it not perhaps be better to continue to give them, hoping that some part, at least, may be utilized.

Dr. Stone.—I have not felt it desirable or warranted in departing from the orthodox diet as ordinarily prescribed in diabetes, but have gotten beneficial results in my restriction of the diet.

Dr. Moss, in closing.—Alimentary glycosuria amenable to dieting is not true diabetes. So the withdrawal of carbo-hydrates is for diagnostic purposes.

Dr. Busby not being present, there was no pa-

per on Diabetes Insipidus.

Dr. Quinn read a paper on "Empyema or Purulent pleurisy," which is secondary to various diseases, scarlet, and typhoid fevers, taking first place, pneumonia, and tuberculosis being a close second. Local causes are:—Fracture of ribs, perforating wounds, abdominal troubles, from extension of suppuration. Treatment — Evacuate pus.

Discussion: Dr. Dixon.—All cases of empyema are secondary. Treatment simple, prognosis good. Many cases of simple effusion become purulent by introduction of aspiratory needle, so would not advise use of aspiratory needle if it could be avoided or unless it was necessary, to evacuate contents.

Dr. Moss.—Musser claims that there is no such thing as resolved pneumonia. An empyema is a localized collection of pus. One point in diagnosis is the triangular area of dullness on opposite sides.

Dr. Moseley emphasizes the withdrawal of the anesthetic before opening the pus cavity, as alarming symptoms and even deaths occur when this precaution is not taken.

Dr. Bethel.—Chilly sensation, fever, irregular sweats would indicate pus. So should look for it.

Dr. Quinn, in closing, emphasizes two points. Distension of veins over abdomen suggests pus, and Bacelli's sign, the lack of transmission of whispered voice. Some cases, in spite of care die, some on the operating table, some afterwards, but we are justified in making an effort, particularly in children.

Dr. Dunn read an excellent and carefully prepared paper on "Otitis Media — Treatment of Suppurative Rather Than Catarrhal Conditions," which was discussed by Drs. Moseley, E. N. Powell, Moss, Poole, and Dixon.

Business meeting.

Dr. Dixon emphasized the need of a systematic cure of cases, by the state of habitual periodic drunkards, and advocated the idea that the State should take some steps toward preparing a place where these unfortunates may be rationally treated, being dismissed when cured and re-committed as often as necessary, and suggested that this society should take some action on the subject. On motion the matter was referred to the Committee on Public Health and Legislation, to draft appropriate resolutions, expressing the views of this society. Society adjourned.

June 24,—The weather being unfavorable, the grass wet and the ground muddy in Atkinson Park, the afternoon meeting with a barbecue and chicken roast, as scheduled for June 24, of the Henderson County Medical Society was called off and the meeting was held in the office of the secretary at 8 P. M., the barbecue being deferred to some future date. The following were pres-

ent:—W. S. Forwood, Moseley, Hancock, Letcher, Dunn, Quinn, Stone, and Griffin, with Leon Bauldauf, of the Bender Laboratory, Albany, N. Y., present as guest. W. S. Forwood, president, in the chair. The minutes of the preceding meeting were read and approved. There being no clinical cases, the program, as arranged, continuing the discussion of nephritis, was rendered.

Dr. Letcher read an excellent paper on "Scarlet Fever" in which he mainly confined himself to the diagnosis and treatment, and mentioned the various complications and sequelae, particular attention being given to forms of nephritis following this disease.

Dr. Hancock read a paper on "Interstitial Nephritis." In it he made a plea for a more rational classification and a closer study of all forms of nephritis, suggesting that the future has more possibilities of advancement than has heretofore been considered possible. Metabolism, perhaps, more than any other one cause enters into the etiology of nephritis, and asserts that the more we study the subject from this point of view, the further away from the kidneys are we more liable to get.

Leon Bauldauf read a paper on "Pathology of Nephritis," saying, in part, that as conclusions from pathological studies are only of value when compared with normal organs, I shall first give a description of the normal kidney, then we will be better able to understand the abnormal conditions. Pathologically speaking there are two main types of nephritis, chronic Parenchymatous Nephritis, in which we have the large white kidney, and chronic Interstitial Nephritis, with its small contracted kidney. These two types were ably described both macroscopically and microscopically and compared with the normal kidney, the clinical significance of each being briefly touched upon. Discussion.—The papers were jointly discussed by every one present, after which a motion was passed thanking Dr. Bauldauf for his courtesy in preparing the paper. The society adjourned for its summer vacation until September.

SILAS GRIFFITH, Secretary.

Proceedings of Jefferson County Medical Society, March 25th, 1907.

Dr. Ravitch reported a case of lupus erythematosus. It belonged to the variety known as "butterfly" or "Bat's wing." The case being a rare one, since it was accompanied by rather unusual condition namely, the ectropion of both eyelids. Three years ago the patient had typhoid fever and the disease, which had existed in a mild form for a year, had entirely disappeared during that disease. We all know that certain skin diseases are all associated with and at times killed or temporarily stayed by the toxins of certain diseases. So in this case, the toxins of typhoid

seem to stay the lupus. Six months afterwards, the patient noticed a little plugged gland on the left side of the neck and an erythematous patch. Stimulating mixtures were applied by a local dermatologist which only caused the disease to spread more rapidly. Afterwards, caecodilate of soda was injected hypodermically above the mastoid, and the most extensive erysipelatos inflammation followed accompanied by pronounced disturbances of the general health.

The inflammation which began in the follicles and the sweat glands spread in the cutis, extending downward to the epidermis. Involution took place in this manner; the newly formed connective tissue shrunk, atrophic scarring resulted, the cutaneous follicles obliterated and the sebaceous and sweat glands disappeared.

Dr. Ravitch reports improvement from mild applications. The best remedies are those which tend to reduce the cutaneous hyperemia such as quinine, ergot and salicylates. Externally, the mildest remedies ought to be used, such as oleate of zinc, diachylon ointment and Lassar's paste. As in this case, the eyes were the most disfiguring features. Dr. Ravitch invited ophthalmologists to suggest a remedy.

Discussion.

Dr. Ray: It seems to me that this is purely a dermatological case. The condition about the eyes is a secondary affair altogether. This woman came to my office several months ago and I asked her name and address and she refused to give them. I told her that I would not treat her nor examine her until I could get some history of her condition. She walked out. I have never had an opportunity to examine the case. The character of the skin disease the dermatologist will decide. I cannot express an opinion as to the character of the skin lesion. The ectropion is simply the result of the ulceration and contraction going on in the skin.

The most suspicious thing I see in the case is the sinking in of the bridge of the nose. I think before an eye, nose and throat man could base an opinion on the case it would be well to examine the interior of the nose. She had evidently had some ulceration going on in the interior of the nose destroying the septum and before I would express an opinion as to the etiology of the case I would like to make an examination of the interior of the nose. The condition looks much improved since she was in my office. As to the etiology of the case I am not in a position to make a statement.

From the ophthalmological standpoint the only indication would be to get rid of the inflammation that is now going on in the skin and after that some form of plastic operation would be indicated by making an incision and shoving the flap up and shortening the edge of

the lid and get it in contact with the eyeball. I have tried several cases by taking a piece from the scalp and twisting it around over the denuded surface. I have tried the Thiersch method and the Wolfe method. In the former the flaps are made with a razor. In the latter the skin is taken from a distant part of the body. The trouble with these operations is the enormous contraction that takes place afterwards. I have seen cases where immediately after the operation the epidermis would grow and the graft take and you would be enthusiastic over the result, but as time goes by the transplanted piece of epidermis begins to shrink and in six months or a year it is in the same condition as before operation. The only ones that do not shrink badly are those where you have a pedicle and you twist it around and fill up in that way.

Dr. Pfingst: I have had this case under observation six or eight months and have been interested in the possibility of doing some plastic work for this woman. She is in a bad condition and unfit to make a living. She has been doing sewing but she is unsightly and is shunned by her former patrons. I have been waiting for this inflammatory condition to subside. At times I think it is worse than at others and the question arises whether the sutures would hold at all in this case. The method that I would deem best in this case would be to unite the edges of the lids at the same time we did the plastic work and leave them there for three or four months. The trouble about getting a large flap with a pedicle is that the skin is so diseased on one side that it would be impossible. The chance to this woman seems to be a slim one.

It is an interesting condition so far as the skin is concerned.

Dr. Bloom: I am sorry that the gentleman who brought the case did not announce it as a case of lupus erythematosus because I would have looked up the statistics and have seen how frequent these cases are. They are not infrequent. I see six or seven of them a year. At the present time I have two of them under my care. One is comparatively recent, Dr. Koehler has seen it. The other I have had under observation for twelve years. I showed the latter case in its early stages to the Clinical Society ten years ago. In this case there is a superficial cicatrization after treatment and when the treatment is discontinued there is a spread of the disease.

In this case the disease began in the temporal region spreading over the side of the face. I saw the patient last two months ago. The skin is perfectly smooth and white on one side. Since then the disease has spread to the neck.

I do not believe that syphilis can be suspected

if we consider the type of the disease. The type of the disease as Dr. Ravitch said is the "butterfly spread." When localized thus, using the nose as a body and the cheeks as wings it spreads as the disease in this case has. There is no stopping the disease. It is as obstinate as true lupus. Its spread is certain. The disease will recur. Different stages of the disease demand different treatment, I am surprised at the result of the treatment in this case, diachylon and Lassar's paste are simply indicated in the acute form to allay inflammation. This is certainly not in the acute stage.

I doubt whether there will be for many months or years a chance to do any operation on the everted lower lid.

I do not know in what per cent. of a thousand cases lupus erythematosus occurs. I believe that very little can be done in such cases. I fail to see why salicylic acid internally should influence such cases. The etiology of the disease is obscure. There is nothing in the etiology of the disease to show that it can be relieved by salicylic acid. When we use strong applications they produce an acute inflammation and probably in this case the application of mild remedies afterwards brought about the seeming improvement.

The case is an extremely interesting one and I concur in the diagnosis. There is not a reasonable doubt as to its correctness.

Dr. Ray: How do you account for the sinking in of the nose? Does this disease extend to the mucous surfaces?

Dr. Ravitch: It sometimes extends to the mucous membranes. When she came to my office the first time the disease was going on quite rapidly. The treatment I have been giving her—I have two cases that improved—I might say were cured under the X-ray, but the disease was not so extensive as in this case. I gave her aspirin and ergot and they seemed to do more good than anything else.

A good many authors recommend arsenic for such cases and some cures have been reported. I have never found that arsenic does any good in skin diseases whatever.

Dr. Wilson: What was the method of using the caecodylate of sodium—

Dr. Ravitch: It was not used by me but by the other physicians. It was used by hypodermic injections.

Dr. O'Connor: This patient was in the hospital five years ago. The disease was as well marked then as now. She was in the hospital for some pulmonary trouble marked as tuberculosis and under Dr. Krim's instructions was given sodium caecodylate intravenously for several days. Those who saw her at the time thought that this trouble was lupus. During the time that she was under treatment there was

no sign of the condition of the skin becoming worse. It did not improve any.

Dr. Wilson: I have used the cacodylate of sodium rather frequently in pulmonary troubles and have never seen any local inflammatory conditions set up at all. I used it hypodermatically a number of times and I asked for information as to how it was used in this case.

Report of Five Cases of Compound Fracture of the Skull by H. H. Grant.

In the report I make are included five operations for compound fracture of the skull with trephining.

Case 1. J. K., age 16 years, white, fell through an elevator shaft Jan. 12, about twelve feet and when picked up was unconscious but not paralyzed. A wound presented running from the hair junction on the forehead over the longitudinal sinus backward and downward toward the left ear. The patient was in a convulsive state most of the time while being transported to the infirmary. After some preparation including shaving the scalp, the wound was opened and fully explored. A depressed fracture and some hemorrhage was disclosed. After the loosened bone was removed there was left a deficiency of bone about one inch wide and two or three inches long. There was a very annoying hemorrhage which was finally controlled by pressure. It appeared to come from the longitudinal sinus. There were no further convulsions and partial consciousness returned in 24 hours. On the second day the packing was removed, there was no bleeding. One or two spicula of bone delayed final closure of the wound for about a month, though there was uninterrupted progress. The depression can still be felt along the line of removed bone but the young man seems as well as ever both mentally and physically.

Case 2. W. B., col., age 27, male, on the night of Feb. 9 patient was struck in the forehead by a heavy drinking glass thrown at him. He sustained a compound fracture of the skull; when first seen he was unconscious, and was said to have had a convulsion. Respiration was stertorous and labored, and pulse was weak and compressible. He had a convulsion on the ambulance that lasted about ten minutes. Operation done at 1:30 A. M., Feb. 10.

Patient had a compound fracture of the skull in the frontal region. Line of fracture extended almost entirely across the frontal bone about one inch above the eyebrows. Wound enlarged and a piece of depressed bone removed at the site of fracture as large as a fifty cent piece. Line of fracture followed some distance to locate bleeding vessels, but they could not be found. Gauze packing placed in the wound and wound partly closed. In 36 hours the packing

was removed some hemorrhage occurred. Re-applied packing which was removed the next day, hemorrhage had stopped. Clots were irrigated out. He left the hospital on the following day against advice. Patient gained consciousness immediately after the operation and was out of bed on the third day and had no rise in temperature before leaving the hospital.

Case 3. E. H., white, age 39, male. Feb. 24 had a small wound near the post parietal region, and paralysis of opposite side of the body with contraction of the pupil on paralyzed side. Pulse very weak and slow. Respiration jerky and slow. Hemorrhage from ear. Trephining done, and linear fracture discovered extending through the frontal bone and across the temporal to ear. A large blood clot was found and removed and a rupture of the middle meningeal artery found at its entrance to the skull. Hemorrhage was very free. This could not be tied, was packed and hemorrhage partially controlled. Patient died next day, never regaining consciousness.

Case 4. J. S., col., age 31, male. Feb. 16 struck on the back of the head with some blunt object making cut on the posterior parietal region, fracturing the skull and making two flesh wounds, leading to a fracture. A depression the size of a half dollar was found and removed. There was a small linear fracture leading from it. Patient showed few symptoms besides the pain, was not unconscious. Recovery perfect.

Case 5. M. B., col., age 30, male. Feb. 15 Patient strong and well nourished and apparently fairly intelligent. Health good until two years ago when he was struck over the left eye by a heavy iron bar in a rolling mill. This blow rendered him unconscious for a few hours after which time he went home. He suffered intensely with pain in the head and had severe headaches for a few weeks and was unable to work. No depression of bone but a scar above left eye. About five or six weeks after the injury the patient began having spells as he describes them of unconsciousness during these attacks he falls and bites his tongue. Can sometimes tell when a spell is coming on and aura is one of dizziness and weakness, he then tries to run and falls. Spells last about 1-2 hour and afterward he is sleepy and weak for a few hours. Patient had been having as many as three or four a day and rarely passed more than three or four days without a spell. Has had no attack for ten days. A horse shoe incision made including the scar and on exposure of the skull a linear fracture was found running upward toward vertex. A button was removed along line of fracture and considerable callus in the form of a ridge was found along inner table at line of fracture. This was removed.

March 22 patient is practically well and says he feels well. Has had no spell although he has been allowed to gloat at times to see if one could be produced. Wound healed nicely and patient has been up since second day of operation.

Dr. Sherrill: Dr. Grant has presented some cases here which have some points of interest. One point of considerable interest is the observation that two years after the fracture he was able to ascertain the line of the fracture at that time. That is an observation that I have not met with in the literature by any one and I think this is worthy of some consideration. This man had no specific lesion and he would not suspect that to be a case of non-union. If this can occur with any frequency it explodes the old idea that fixation is necessary for union and that fixation will result in union. It is a point that should be looked out for in the future as to whether fractures of the skull do remain patent in cases of this kind.

This same case brings out the point emphasized by writers on this subject—that is the late symptoms coming on in injuries of the skull. It brings out the point of prolonged observation in these cases. You may think the patient is well of injuries of the head and the patient goes on for a long time and obscure symptoms develop—marked nervous symptoms, and finally the patient develops epilepsy. We know that more good can be accomplished in preventing this condition than in its cure. We are all agreed as to the advisability of operating in compound fractures of the skull to obtain drainage because some dirt or hair carrying organisms can get in the line of the fracture and terminate in a fatal meningitis. All are agreed that all depressed fractures of the vault should be subjected to operation and the bone elevated.

These cases presented by Dr. Grant do not show any injury to the base except in one instance. In one case he reported hemorrhage from the ear. This hemorrhage may occur without fracture of the base; yet it is suspicious, and if a patient has a fracture of the vault it is liable to proceed down to the base and a compound fracture through the base is of greater moment than a fracture of the vault.

These cases are all serious and yet no case should be given up as hopeless. The severity of the case depends upon the severity of the blow, the amount of infection occurring at the time, the amount of hemorrhage occurring causing compression of the brain, and fourth, which may be classed with the first, the damage done to the brain tissue—the amount of shaking up.

The time the patient is seen after the injury is of importance; if you allow a fragment or clot to press upon the brain for two or three

days so far do you lessen the patient's chances of recovery.

I think Dr. Grant is fortunate in effecting four cures out of five cases of compound fracture of the skull.

Dr. Vance: I think Dr. Sherrill misunderstood Dr. Grant in regard to the line of non-union. You can see the line where the bones have united forty years after the receipt of the injury.

Dr. Harris: It has been my luck to treat possibly half a dozen compound fractures of the skull. I have a little boy on hand now who three years ago was kicked by a horse at the right mental eminence and I removed thirteen pieces of bone from the skull and he made a good recovery, and I am not a surgeon. I tried to bring him up here to-night, but through some misunderstanding was unable to do so.

Three weeks after that I saw a man who had a fracture above the right ear and I removed twenty pieces of bone. The man had paralysis of the left leg and tingling of the left arm. His paralysis and tingling had both disappeared in twenty-four hours and he left the infirmary in twelve days.

One point that I learned out of this case was that it is remarkable how much gauze you can pack in the skull cavity without doing any damage. Another point I learned is that there is very little callus thrown out after these injuries. I do not think in either case that any callus has been thrown out. I am sure not in the boy. Both have large holes in the skull, but neither of the patients has shown any bad symptoms.

Dr. Grant: I have only to say that this line of fracture that we distinctly say was simply a line that indicated where the fracture had occurred. How much union had taken place I cannot say. I had no idea that it was ununited, but I could see the line of fracture which was three inches in length and which was evident to all of us. Doubtless it was merely the bone scar of the original fracture.

Jefferson:—NOTES ON THE NEWER REMEDIES USED IN DISEASES OF THE EYE.

The Silver Preparations.—Nitrate of Silver has long been used in the treatment of certain diseases of the eye, and has been proven to be of especial value in gonorrheal ophthalmia; but on account of its irritating qualities other preparations of silver claiming less irritating qualities, have come into use. Children cry after the use of nitrate of silver, and the congestion following the crying greatly lessens the good effects the drug might produce. In the hands of the unskilled nitrate of silver is an unsafe drug, as it might do great harm. Protargol and Argyrol

are the newer preparations of silver which have come into general use. It seems to be pretty well agreed by ophthalmologists that these newer preparations are not so irritating as the nitrate of silver. Argyrol is perhaps the best silver salt for eye use. It is a much safer preparation for home use than either nitrate of silver or protargol. It probably has as great bactericidal power as any other silver salt, though this is disputed by some observers, and in strong solutions is not irritating when the solutions are fresh, this property to a certain extent diminishes upon exposure to light for a time. Argyrol is not precipitated by fluids containing sodium chloride and albumen. It is claimed that it does not stain the conjunctiva, even when used for a considerable period, but this claim is disputed by some observers. It is used in 5 to 50% solutions in the same class of cases in which nitrate of silver is indicated. In ophthalmia neonatorum argyrol is of the greatest service, as it can be employed freely, and its use entrusted to the patients' attendants. From a report of 400 cases of ophthalmia neonatorum in the Massachusetts Eye and Ear Infirmary: 50 were treated with nitrate of silver, with subsequent corneal infection in 3 cases, or 6%. 150 were treated with Argyrol with subsequent corneal infection in 4 cases, or 2%.

Argyrol is not only bland and unirritating, but is positively soothing to the conjunctiva. The more frequently the solutions are instilled into the conjunctival sac the better.

To secure the best results the infected tissues should be kept constantly immersed in the solution. Practically, this can be done by instilling the solution every 15 to 30 minutes, day and night; ordinarily a 10% solution being strong enough. As soon as pus formation has ceased nitrate of silver, on account of its being a more powerful astringent, should be applied to the everted lids once daily to hasten the reduction of the swelling. Its high specific gravity and its diffusibility are qualities not to be overlooked. A drop put into the eye spreads immediately over the globe and the inside of the lids, floating the pus out between the lids and onto the cheek.

DIODIN (ethyl-morphine hydrochloride).—In ophthalmic therapy no drug has ever shown so interesting and effective a combination of properties as this drug. This drug not only possesses a profound analgesic power, but it also has a favorable action upon the morbid process itself. The physiological action of dionin is that of a powerful lymphagogue, and vasodilator. It stimulates the lymphatic and vascular systems of the eye, producing redness and very marked vascular dilatation with abundant lacrymal secretion. The lymphatic channels become so distended as to attain in some instances several times

their original dimensions. The conjunctiva frequently becomes enormously swollen, and the eyelids themselves sometimes partake in this swelling, indeed, the eye occasionally assumes an alarming aspect, but no danger need be apprehended. A noticeable feature of this drug is that the greater the reaction, the more beneficial the results. Dionin has a wide range of usefulness as an analgesic, but it is not an anesthetic. It acts upon inflamed mucous surfaces, quieting deep-seated pains such as accompanying glaucoma, iritis, iridocyclitis, etc., while cocaine has little or no effect upon such conditions, but completely anesthetizes normal mucous surfaces. In iritis dionin has a three-fold effect, relieves pain, hastens absorption of exudates and assists atropin in dilating the pupil. In deep-seated inflammations of the eye which are beyond the reach of other analgesic remedies dionin is of great value. It facilitates the absorption of post-operative-debris after cataract extraction or diminishes tension in glaucoma. Very gratifying results have been obtained from its use in recent opacities of the cornea, the more recent the opacities the better the results, but even with old-standing opacities, some improvement may be derived from its use. It has been found particularly useful in interstitial keratitis. It is also a most helpful adjuvant in the treatment of corneal ulcers, in which condition it helps to control pain and by lessening intraocular tension it favors healing. As a soothing application in hypersensitive and irritable eyes it has no superior. In sympathetic ophthalmia dionin will render good service in promoting the absorption of plastic exudate.

In any condition in which this drug may be used the more recent the inflammation and the higher the tension the better will be the results. It is an agent which can do no harm, hence its great value. Both as regards the degree and the duration of the relief afforded dionin is far superior to holocaine or cocaine. There is an occasional effect produced by dionin at its first use regarding which the patient should be carefully warned, otherwise it may harm him very much, and lead him prematurely to abandon the use of the drug. After the first instillation it may cause a feeling of burning irritation, followed by an intense chemosis of the conjunctiva which may swell up, and even overlap the cornea. This, however, need not cause the slightest alarm as the chemosis very rapidly subsides. It is a condition which may even be welcomed, as in these cases the analgesic effects of the drug seem to be the greatest. It appears only after the first or second instillations, never after subsequent ones.

Although the application of dionin to the eye is painful, undue stress has been laid upon this feature by those who have chanced to fall upon

a patient hypersensitive to the product. When the physician warns his patient with regard to this point and insists that the temporary discomfort will be followed by marked therapeutic results, there will be no difficulty about putting up with the pain. Moreover dionin should never be placed in immediate contact with the cornea, hence solutions, and especially the substance itself should be placed in the lower cul-de-sac, and in extremely sensitive patients, cocaine may be dropped into the eye before the dionin is used.

Since dionin is neither a mydriatic nor a myotic, it has been hard to understand how it can help atropia to dilate the pupil in iritis, and also aid eserine in contracting the pupil in glaucoma. It is reasonable to conclude that dionin helps atropia to dilate the pupil in iritis by its solvent effect on the plasma that would cause and maintain adhesions, and that it hurries out of the eye the dissolved plasma by opening the lymph channel. It is not unreasonable to conclude that dionin aids eserine in contracting the pupil in glaucoma, by opening the lymph channels, thus encouraging the outflow of the watery contents of the globe, thereby lessening intraocular pressure.

The general practitioner finds it difficult sometimes to determine whether he is dealing with a glaucoma or with an iritis. He is afraid to use atropine, knowing that it is contraindicated in glaucoma, and that it is criminal to neglect its use in iritis. Heretofore he has had to choose between atropine and eserine in such cases, and on his choice of drugs has probably turned the recovery or irreparable damage of an eye. With the use of dionin a mistaken diagnosis may not prove so disastrous, as in either of these diseases dionin will prove helpful until such time as he can refer the patient to an ophthalmologist.

The eye develops a tolerance for the drug very rapidly, so that it cannot be used for a longer time than a week without intermission. It can be used in solutions or ointments of 2 to 10%, or the pure powder placed in the conjunctival sac. A 2% solution rarely causes chemosis of the conjunctiva and very little smarting while a 5% solution causes considerable smarting and sometimes violent sneezing. For home use it is not well to use the pure powder.

Holocaine hydrochlorate, is an excellent local anesthetic, manufactured synthetically, which is very popular, and has supplanted cocaine among many oculists. It is usually employed in 1% solutions. The advantages of this drug as compared with cocaine are: it acts more quickly; is more penetrating; does not dilate the pupil; is not poisonous when applied locally; it has a negative effect on the corneal epithelium; it possesses antiseptic qualities and its solution does not spoil. It cannot be used hypodermically

since it causes toxic symptoms when employed in this way.

Alypin or monochlorhydrate of benzol. A new anesthetic which claims superiority over cocaine in many respects.

It is freely soluble in water. Boiling for ten minutes sterilizes without destroying its anesthetic properties. It can be used with adrenalin without undergoing chemical or pharmaceutical change. Solutions of 2 to 4% can be used upon mucous membranes or subcutaneously without dangerous or disagreeable symptoms. The effect upon the blood vessels is to produce dilatation, the opposite of cocaine, which is vaso-constrictor. Anesthesia is complete in one minute and lasts 10 to 12 minutes and often longer. No effect is produced upon the pupil or upon accommodation, nor is the corneal epithelium disturbed as it is by cocaine. It is less poisonous than cocaine.

Adrenalin or **Suprarenalin** is the active principle of the suprarenal gland. It is a valuable astringent and haemostatic. After instillations of solutions varying from 1-10000 to 1-1000, marked blanching of the conjunctiva occurs as a result of contraction of the blood vessels, beginning in less than a minute and lasting half an hour or longer.

When the ocular structures are very much congested cocaine or holocaine produces unsatisfactory anesthesia; if the instillation of these agents is followed by that of adrenalin or suprarenalin solution, the anesthetic effect is very much more pronounced. This remedy is used in some cases of conjunctivitis with marked congestion in affections of the lacrymal passages to facilitate the expression of retained contents, and the introduction of probes, in operations upon the laryngeal sac, glaucoma, and in congested conditions of the eye in general to blanch the tissues, thus permitting a more or less bloodless operation, and making the action of local anesthesia more satisfactory.

DISCUSSION.

Dr. Dabney: I have enjoyed the paper very much. I would like to say a word first in regard to the recent preparations of silver. Argylol holds an important place in ophthalmology, but I doubt whether it will supplant the use of nitrate of silver. The doctor refers to its use in gonorrhoeal ophthalmia in the infant and in the adult. The subject is still under discussion and in the notes of the Philadelphia Ophthalmological Society recently Dr. DeSchweinitz took the view that it is unsafe to trust argylol and protargol and that it was wiser to use nitrate of silver once a day. Dr. Bruns of New Orleans is enthusiastic about these preparations and he is using them by frequent instillations every hour or two during the day. DeSchweinitz recommends that the nitrate of silver in two

per cent solution be used once a day. I have used argyrol alone in only one case of gonorrhoeal ophthalmia. The patient was a young man who was brought to this city and I treated him exclusively with this agent and he made an admirable recovery—the most rapid I have seen. In all other cases I have used nitrate of silver.

Recently I saw with Dr. Pfingst a gentleman who had purulent ophthalmia in one eye and argyrol was used very frequently with nitrate of silver once a day. The case considering the severity has done well indeed.

The only danger in injecting argyrol into the tearsac in dacryocystitis is that either by a false passage or by an opening already in the sac, the medicine will get into the adjacent tissues. If so it produces an unsightly discoloration which may last many weeks. I have had this accident once. The staining lasted several weeks. The case was finally cured by removing the tear sac.

I saw a young lady of sixteen years last week who had been treated by some oculist who had had this accident occur. However, I think if we are careful this accident can generally be avoided. I do not think there are many cases where that accident would happen. This young lady whom I saw the other day said that this staining of the skin had lasted longer than in my own case.

In regard to dionin, I heard one of my colleagues say the other day that he believed it was without value. It seemed surprising to me that he should have that experience. In my hands it is certainly a valuable analgesic.

I have a patient on hand now with a severe iritis. He came near losing his eye. He was an intelligent gentleman living in another city. He was the president of a bank. He was treated by an osteopath for several weeks and came very near losing his eye. No mydriatics were used in his eye all this time. He is now making a good recovery. The dionin gives him the greatest relief and lasts for a number of hours, far longer than atropine used alone or combined with cocaine.

One of the most interesting questions about the use of dionin is the personal idiosyncrasy of the patient. In some people it has no effect. You might think it is an imperfect product that you are using, but you can put the same preparation in the eyes of another person and you will have ecchymosis and swelling of the lid and the patient will have relief afterwards.

Dr. Pfingst: I am in a way sorry that I was put down as a leader of the discussion because I have abandoned the use of most of these so-called new eye remedies..

As to the use of argyrol, like Dr. Dabney, I feel safer when nitrate of silver has been used on the conjunctiva and I treat them with nitrate of

silver once a day and in addition use argyrol in 25 per cent solution every hour or two during the twenty-four hours. I believe we get most effect from the argyrol on account of its thickness. It raises the lid and allows the fluid to penetrate and the pus to escape. It is said to penetrate deeper than nitrate of silver.

The point of discoloration is one of importance to us. It will happen to any one who uses this remedy more or less. I have had one of my own and I have seen another where the skin over the tear sac was permanently marked. One case I saw after the discoloration had lasted for a year. I saw the patient six months afterward and it was still there, it has been there for a year and a half. My patient has never forgiven me for it.

As to dionin, I still use it for one purpose and that is for clearing up the cornea. I must have been unfortunate in my results because every time I have tried it, the patient has complained of severe irritation. I have tried it with cocaine and after the cocaine wore off the patient complained of its irritating effect.

Just a few words in reference to the use of holocain. The results are not as effectual as in cocaine. It has the advantage in operative work on the cornea in that it does not cause the cornea to become clouded as we see it occasionally after the use of cocaine. I employ holocain only for the needling operation for secondary cataract; otherwise I prefer cocaine.

Dr. Cheatham: Adrenalin in glaucoma is a very dangerous remedy. It increases the tension. I would be afraid to use it in glaucoma. I have occasionally had an infection following the operation for cataract and the infection cleared up very rapidly under the use of dionin. I have a great deal of faith in dionin in septic cases, and especially when the vitreous is involved.

Dr. Ray: The subject is a very interesting one. Most of the drugs the essayist mentioned are remedies that I have been using for a number of years. Most of them could hardly be spoken of as "new remedies". We know their therapeutic action and are able to tell the result to be gained from them.

I would like to say that I am a believer in the nitrate of silver. I think it is the greatest remedy we have in treating diseases of the mucous membranes. We formerly used it in solutions that were strong enough to produce a more or less superficial caustic effect and in that way we probably did some damage, but when we use it in the strength of one or two per cent I do not believe it has any caustic effect. I believe that the injurious effects only come from the prolonged use of it, putting it in the hands of the patient and neglecting to warn them of the staining that might result from its prolonged use. I consider nitrate of silver the most valuable single agent that we possess in the treatment of

mucous surfaces.

As to the other silver preparations the one under discussion to-night is argyrol. I have had a good deal of experience with it and I probably use it daily. I do not believe that this remedy in the strength of five to ten per cent. has any influence in purulent ophthalmia. I believe in all inflammations about the eye it is of some benefit, if we get any effect we must use a solution stronger than ten per cent. In purulent ophthalmia it should be used in a strength of twenty-five per cent. solution and it should be used as often as the eye is cleansed. Yet at the same time I agree with the gentlemen who preceded me and I do not believe I would be willing to have my own eye treated for a purulent ophthalmia without the use of nitrate of silver. I begin with a solution of the nitrate of silver. Then I try argyrol and have it sufficiently strong to have some effect.

The only other drug that came up in the discussion is dionin. I believe that dionin is a valuable agent in relieving pain in certain eye diseases. Beyond that I doubt that it has any therapeutic effect.

Dr. Pusey: I have gotten such good results from the use of argyrol in two or three cases of purulent ophthalmia that I use it in preference to the nitrate of silver, especially if the cornea is ulcerated. If there is any corneal involvement at all the patient cannot use the nitrate of silver; it must be used by the doctor. The patient can use the argyrol solution.

Dr. Flexner: The value of the silver salts as antiseptics, especially the organic compounds, depends upon the amount of silver that they contain. Analysis shows that in these preparations the amount of silver varies so that the effects are bound to vary. The conditions are different with the nitrate of silver. It is a stable compound.

There is another difficulty about getting the effects from the newer preparations of silver; they decompose. Nitrate of silver of course destroys bacteria practically when it comes in contact with them. In order to get the effects of the organic compounds the silver must be decomposed by the secretions and that accounts for the difference in these results.

Henry E. Tuley: Everything that has been said in reference to the use of these remedies has been in the disease of the eye. I want to make a plea for the more general use of the nitrate of silver as a preventive of purulent ophthalmia in the infant. It should be used in a two per cent solution, one drop in each eye of every infant immediately after birth. I have never seen a case in which it produced irritation, and I have never seen ophthalmia occur where it has been used.

Dr. Hall: In reply to Dr. Flexner. In an ab-

stract appearing in "Ophthalmology" an extended series of observations were made of all the silver preparations by several observers and they proved that the beneficial effect in purulent conditions of the eye could not be attributed to the germicidal property nor to the amount of silver. Argyrol is without germicidal effect and its effect upon purulent conditions of the eye are unmistakable.

As far as the use of argyrol is concerned, I believe in its use in strong solutions. In purulent inflammations of the eye I use a fifty per cent solution. However, in frank gonorrhoeal cases it is wise to treat the eye once a day with nitrate of silver solution one to two per cent.

In regard to the use of dionin, a number of men lately have recommended its use in ointment form. I have tried it in a number of cases and have found that while it was less painful to apply than in solution or powdered form the reaction and after effect was correspondingly less and therefore seemed less efficient.

Dr. Bate: As a general practitioner I suppose I cannot say anything on the paper. I want to say that twenty years ago when Dr. Bruner was cutting briars on his side of the fence I was cutting briars on my side of the fence. I am on the same side of the fence as Dr. Bruner to-night, gentlemen.

Dr. Bruner: I want to thank the gentlemen for the discussion of the paper. I want to say that I formerly used argyrol in strong solutions. I left a twenty-five per cent. solution in the hands of the patient and used a fifty per cent solution myself once a day. I now get better results from a ten per cent. solution used every fifteen, twenty, or thirty minutes as the case requires.

In regard to the use of argyrol in new born babies that Dr. Tuley mentioned, I think we ought to use argyrol more often. The effects are less irritating and there is less lachrymation after the use of argyrol than after the use of the nitrate of silver. This is a very irritating preparation and I would not want it dropped in my eye indiscriminately. Argyrol will do the same good and is less irritating.

Jessamine.—The Jessamine County Medical Society met in regular session at the office of W. H. Fish, June 20, 1907. Following members were present:—Mathews, Barnes, Fish, Penick, Pearson, Pentz, and VanArsdall. In the absence of President Welch, Dr. Barnes occupied the chair. Minutes of previous meeting were read and adopted. Dr. Pearson showed an interesting pathological specimen, the breast of a virgin in which malignancy was suspected as the growth of the tumor had been very rapid, on removal it presented an interesting condition which was believed to be Premature Senile Atrophy of the

Breast, the other breast is now involved. Dr. Pearson read a paper on "The Deductions and Theories of Three Distinct Psychic Phenomena of Pregnancy." The physician called attention to the first, the change in the nervous system manifested in vomiting, calling attention to the theories advanced as to the cause of vomiting. Another phenomena is longings. The author dwelt at some length on the theory that there might be some psychic relation between the mind of the mother and that of the child in embryo, and incidentally paid his respects to the theory of material impressions, but he believes that there is nothing in the theory as it exists in the minds of the laity. The physician's paper showed much care in preparation and was much complimented. Dr. Fish led the discussion and all present participated in it and it drifted into a discussion of the early signs of pregnancy and maternal impressions. Dr. Welch is to read a paper at the next meeting. The chairman suggested that some of the members should report a clinical case at the next meeting. The society adjourned to meet July 18 at 8 P. M., at Dr. Barnes' office.

J. A. VANARSDALL, Secretary.

Metcalfe.—The Metcalfe County Medical Society met at Relief Sanitarium, Summer Shade, at 10:30 A. M. June 13, 1907, Dr. Owen in the chair. Drs. Owen, Bushong, Depp, Metcalfe County; Richardson and Chism, Cumberland County; Palmore, Monroe County; Froedge and Siddens, Barren County; Dr. Rau, of Bowling Green; Dr. Bateson, of Scranton, Pa., present. Drs. Owen, Palmore, Richardson, and Siddens, had brought their wives, and Dr. and Mrs. Bushong had invited some lady friends in town, so the morning session was given to social duties and pleasures. A bountiful dinner was served at "Vinita House" with Mrs. Bushong as hostess, and a host of friends and associates. After dinner cases were presented. (1) Miss C., aged 22, good family history—has been having trouble in controlling muscular action for several years, began when patient was 14, came on after a fall. Have spells of nervousness and lose consciousness. "No, I am not hysterical"—patient says: "I sleep well, too well, in fact, feel tired and have a desire to lie down. I go to sleep at once."

Dr. Rau.—I think there is no doubt that the young lady has chorea. There is most always some little bit of rheumatism in all of these cases. So look out and provide for it. Give arsenic to full toleration—Fowler's Solution preferable. Always examine the urine." (2) Mrs. G. comes for growth on chest. Had abscess on chest 15 years ago. Left some scar tissue, for last two years the scar has been growing and is

red. Diagnosis—Cicatrical Keloid. Advised to have it excised.

After clinic was exhausted the picture man got us. We then repaired to the church where we were given a song service, after which Dr. Froedge introduced Dr. Rau, of Bowling Green, Councilor of the Third District, who addressed the assembled audience in his usual, happy way. Subject, "Medical Organization and Its Benefits to the Public."

Miss Lillie Nichols gave a delightful solo, which was followed by an address by J. C. Bateson, of Scranton, Pa. Subject, "How to Help the Doctors Help the People." His address was earnestly listened to and enjoyed by all.

Next Mrs. Bushong, in a delightful little talk, rendered those present still "gladder" that they were present, even thanking them for eating the many good things she had prepared for the occasion. Dr. Bushong then thanked us all for our attendance and expressed his regrets for the many disadvantages under which we had labored, and that there had not been more of the doctors of the different sections present. The committee on resolutions then offered the following:—"Resolved, That the physicians of Barren, Cumberland, Metcalfe, and Monroe counties assembled at Relief Sanitarium, Summer Shade, extend to Dr. Nell, of Gradyville, Adair county, our heartfelt sympathy in the loss of his beloved wife and children in the Gradyville flood.

2. That we extend our thanks to Mrs. Bushong and the Doctor for his delightful hospitality and for the bountiful feast spread before us, and regret that all the doctors from the four counties could not be present.

3. That we wish to thank the American Medical Association and the Kentucky Medical Association for sending us Dr. Bateson, of Scranton, Pa., and Dr. Rau, of Bowling Green, and we desire to thank them for their presence and the help given us.

4. We thank the young ladies for the excellent music given us, and for the part they took in making our visit to Summer Shade so pleasant.

5. We thank you all for the pleasure we have had in meeting you and being with you.

(Signed)

DR. FROEDGE, Barren Co.,

DR. RICHARDSON, Cumberland, Co.,

DR. BUSHONG, Metcalfe Co.,

DR. PALMORE, Monroe Co.

E. E. Palmore, Acting Secretary.

Nelson.—The Nelson County Medical Society met in Bardstown on June 5th, 1907, with eight members present. In the absence of both president and vice president, W. Lucien Heizer was called to the chair. The Secretary reported 19 members who had paid their dues. Minutes of

the last meeting were read and approved.

H. E. McKay reported a case of gunshot wound of ten weeks; shot in upper and back of thigh, ball not located. Abscesses formed on the third day, and a second one on fifth day, both of these were small, and were freely drained; at the end of six weeks a third and large abscess had developed, which when opened discharged eight ounces of pus. The peculiar and interesting feature of this case is the entire absence of fever. No elevation of either pulse nor temperature during the whole time.

J. J. Greenwell reported a case of measles in a child two and one-half years old, accompanied by great tympany, with constipation and death. Postmortem revealed complete occlusion of the colon for a distance of three or four inches which was so complete that gas could not be forced through it. This condition of the gut was due to an old iliocolitis from which the child suffered the preceding summer, and had since, suffered from alternate constipation and diarrhoea.

These chronic conditions were lighted up by the attack of measles which resulted in the complete obstruction of the gut mentioned above, and death soon followed.

W. Lucien Heizer reported a case of cancer of the uterus, in a patient aged fifty-two, who had suffered for a few weeks from considerable uterine hemorrhage, and on scraping away some of the tissue from the cervix uteri and putting it under the microscope a positive diagnosis of malignant trouble was made, and a hysterectomy was decided on the uterus with all of its appendages were removed, amputating low down in the vagina. It is now twelve days since the operation and the patient is doing well. Dr. Heizer advocated very earnestly the use of the microscope as an aid in diagnosis in all such cases.

Dr. McKay read a paper on the use of hyosine morphine and caetin tablets (made by the Abbott Alkaloidal Company) as an anesthetic. One statement by the essayist was that it was claimed that this combination would produce such profound anesthesia during labor that the accouchment could be completed without pain, and that the mother would, or might remain in a profound sleep for six to eight hours.

DISCUSSION.

Dr. Smith—I have not tried this combination and would very much fear to leave a woman sound asleep immediately after labor.

Dr. Rodman—I would prefer to use chloroform or ether during labor and would fear bad results from an anesthetic which had such lasting effects. I could not leave a postpartum patient asleep and would not care to remain several hours to see that she awoke alright.

Dr. Heizer—I think it best to keep in the well-

beaten track. I fear to get away from well-tried and safe remedies.

All present concurred in the opinion that they would fear leaving a postpartum woman asleep. Dr. Rodman read a paper on measles in pregnancy, with a report of a recent case which was nearing the term of gestation. The patient had high temperature, troublesome cough, great nervous excitement, but made a speedy and perfect recovery from the measles, and on the nineteenth day from the onset of the measles was delivered of a well-developed healthy baby, at full term, and mother and baby did well, and baby had no post-birth measles.

Dr. Smith—I have never seen a case of pregnancy, complicated with measles, but I had a baby seven days old to have measles, in a house where no measles had existed for three weeks; this I regard as a short period of incubation.

Dr. McKay—I have seen three such cases, and I have seen bad eye troubles in all. And in all of these cases I had troublesome postpartum hemorrhage. One case which was born at 7 1-2 months, baby born alive with measles eruption well marked, and died in a short time.

Dr. Heizer—I have had only one case of this kind, the mother was 7 1-2 months pregnant when measles attacked her. She gave birth in five days to a baby with a well defined measles eruption on it which lived ten days. And on the tenth day the mother had a chill followed by septic fever.

Dr. McClure—I have seen no cases of measles during parturition, but I regard Dr. Rodman's paper a good one, and he is to be congratulated on the successful termination of his case. The history of such cases is not encouraging. Such papers as this should be published.

Dr. Rodman, closing—This having been the first case of this kind I had ever seen, and the history of such cases is so discouraging, and the case terminating without an ugly symptom, my extreme anxiety at the onset is my apology for writing this paper. I thank the members for their interest.

On motion of W. Lucien Heizer, seconded by J. I. Greenwell (which was unanimously carried), our next meeting will be held in New Haven, September 11th, at which meeting the following members have promised papers: J. I. Greenwell, Erysipelas; Charles McClure, Spina Bifida; M. E. King, Mammary Abscess; J. E. Smith, subject not given. Every doctor in the County should attend this meeting as Drs. Heizer and Greenwell have promised a royal reception, and they are sure to give it to all who attend.

HUGH D. RODMAN, Secretary.

Warren—The regular meeting of the Warren County Medical Society was held in the doctors'

club room Wednesday, July 10, 1907. In the absence of the president and vice president the secretary, L. H. South, called the meeting to order and E. N. Hall was elected to preside.

Mr. Mutchler, professor of physiology at the State Normal and his class were guests.

W. H. MacCracken gave a very interesting address on Clinical Hematology in which he demonstrated the method of obtaining blood smear and the use of the different stains. He had specimens of normal blood, malarial organisms.

W. P. Drake read a paper on the Early Symptoms of Typhoid Fever. So many symptoms may occur at the beginning of this disease that it is almost impossible to state positively the diagnosis. The Diazo, the widal, and the blood count are important in differentiation. In all suspicious cases the urine or stools should be disinfected and symptomatic treatment is all that can be recommended.

A. T. McCormack—The germs attack a particular part of the intestine which becomes the seat of a local infection. The symptoms are due to the absorption of the toxin.

The patient usually goes to bed as the fever develops.

Laboratory methods are important and assist in differential diagnosis but the clinical picture is more valuable.

J. H. Blackburn—The most important part of this subject to us and to the teachers present is the value of prophylaxis. The germs are spread by the excreta and by thorough disinfection the community can be protected from epidemic.

J. N. McCormack—It is very difficult to diagnose the case in its early history. malaise, headache and backache are the principal symptoms in the beginning. The people and the teachers should understand that if the discharges from the kidneys and bowels were thoroughly disinfected for twelve months in every case, there would be an end of typhoid fever in America.

In country districts the shoes are contaminated by the urine from infected patients, and are carried to the mouth. This source caused nearly all the typhoid during the Spanish-American war.

L. H. South gave a list of early symptoms compiled by Osler for his new book, *Progressive Medicine*, taken from 738 cases during our last war.

Dr. Mutchler—We are very glad to be present, to learn what doctors are and what research work and investigation they are doing. As teachers we want to be in touch with medical societies and the boards of health.

The society adjourned.

L. H. SOUTH, Secretary.

Wayne.—The Wayne County Medical Society

met at its regular monthly meeting June 5th, at 1 P. M. in J. F. Young's office. Those present were J. A. Grady, A. S. Cook, J. F. Young, M. J. Kelley, R. G. Koger, S. W. Bristow, O. M. Carter, and C. B. Rankin. J. F. Young read a very interesting paper on "Summer Diarrhoea", and it was discussed by A. S. Cook, Koger and Rankin. The following have paid their dues:—A. S. Cook, R. G. Koger, J. F. Young, C. B. Rankin, R. A. J. Shelby, W. E. Woodrow, J. A. Jones, M. J. Kelley, and O. M. Carter.

C. B. RANKIN, Secretary.

COUNCIL OF PHARMACY.

IODIPIN 25 PER CENT.

A preparation similar to the preceding, but intended for hypodermic administration.

Dosage.—2 to 6 Cc. (30 to 90 minims) by hypodermic injection. This article is also marketed in the form of capsules, each containing 2 Gm. of iodipin 25 per cent. Prepared by E. Merck, Darmstadt. (E. Merck & Co., New York.)

ODOFORMOGEN.

A nearly odorless mixture of iodoform and albumin.

Action and Uses.—Its action is that of iodoform, which is slowly liberated in connection with wound surfaces, making the action more persistent. It limits secretion, favors granulation and promotes drying. Iodoformogen is recommended as a dusting powder for ulcerated surfaces. Dosage.—Being about three times as voluminous as iodoform, it is usually applied undiluted to the affected parts: It may be used as a snuff in ozena, mixed with an equal amount of boric acid. Manufactured by Knoll & Co., Ludwigshafen a. R. and New York.

IODOTHYRINE.

Iodothyrene is a milk sugar trituration of the active principle of thyroid gland, 1 Gm. representing 1 Gm. of fresh gland and containing 0.0003 Gm. of iodine.

Actions and Uses.—It is similar in action to Glandulae Thyroideae Siccae, U. S. P., but it is claimed to possess the advantage of more definite strength and absence of decomposable extraneous matter. Dosage.—Adults, 0.6 to 2 Gm. (10 to 30 grains); children, 0.3 to 1 Gm. (5 to 15 grains) per day. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany, (Continental Color & Chemical Co., New York). E Merck, Darmstadt (Merck & Co., New York).

ISOFORM POWDER.

Isoform powder is a mixture of para-iodoxy-anisol, $C_6H_4(OCH_3)(IO_2)$ 1:4=

$C_7H_7O_3I$, an iodoxy-derivative of anisol, with an equal weight of calcium phosphate.

Actions and Uses.—It is a germicide and antiseptic in consequence of its oxidizing power and, in contradistinction to iodoform, it acts not only in a medium free from oxygen, but in conjunction with free access of air. It is claimed to be non-toxic in comparatively large doses and to be absolutely non-irritant to the unbroken skin. It is recommended as a substitute for iodoform. Dosage.—Internally, 0.65 to 2 Gm. (10 to 30 grains) per day. It is used externally as a dusting powder, as a paste with glycerin, as ointments, suspensions in glycerin, gauzes, etc., in strength varying up to 10 per cent. of pure isoform. Manufactured by Farbwerke, vorm. Meister, Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

ISOPRAL.

Isopral, $CCl_3CHOH.CH_3=C_3H_5OCl_3$, is 1, 1, 1 trichlor-2-propanol.

Actions and Uses.—Isopral resembles chloral in its action, but is effective in smaller dose. It is prompt in effect and apparently devoid of cumulative action. It has some degree of local anesthetic power. It may be used as a substitute for chloral hydrate and is serviceable as an alternative in cases in which it is necessary to give hypnotics for a long time. Dosage.—0.3, 0.6 to 1 Gm. (5, 10 to 15 grains) in capsules or wafers which should be dispensed in a well-stopped glass vial. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York.)

KASAGRA.

A fluidextract said to conform in drug strength to the requirements of the U. S. Pharmacopeia for fluidextracts. It is prepared with especial care, the drug being extracted with a menstruum containing no alcohol. The preparation is said to contain 0.05 per cent. of alcohol.

Action and Uses.—Kasagra is recommended as an especially palatable preparation of cascara, owing its laxative effects to this drug alone. Dosage.—1 to 2 Cc. (15 to 30 minims) four times a day, half an hour before meals and at bedtime. Prepared by F. Stearns & Co., Detroit, Mich.

KOLA, STEARNS.

Each 30 Cc. (1 fluidounce) is said to represent 31 Gm. (480 grains) of fresh kola nut. It contains 23.5 per cent. of alcohol.

Actions and Uses.—Kola seeds contain from 1.5 to 3.6 per cent. of total alkaloids, of which from 1/100 to 1/40 is theobromine and the rest is caffeine. About one-half of the

caffeine is combined as kolatannate of caffeine. The actions and uses of the remedy are essentially the same as those of caffeine. It is probable that the kola-tannate is not so active as free caffeine. Dosage.—2 to 4 Cc. (½ to 1 fluidram) three times a day. Prepared by Frederick Stearns & Co., Detroit, Mich.

KRESAMINE.

A clear watery solution of 25 per cent. of trikresol (which see) and 25 per cent. of ethylene-diamine.

Actions and Uses.—Kresamine is a powerful bactericide, with a claimed minimum of toxicity. It is said that the bactericidal effect of the cresol and its power of penetrating the animal tissues are greatly enhanced by the presence of ethylene-diamine and it is claimed to be far less irritating when used as a wet dressing than other antiseptics. It is useful in all cases where an active bactericide is required and particularly when the microbes are in an albuminous menstruum. The preparation is not so dangerous as carbolic acid. It has been recommended for the treatment of ulcers, eczema, lupus and other skin affections. Dosage.—It is used only in dilutions (2 to 25) containing 2 per cent. or less of each of its active constituents. Kresamine may be applied in the form of ointment. A dilution containing 2 per cent. of each ingredient was formerly marketed under the name of "Ethylene-diamine Trikresol Solution." This was used without dilution. Prepared by Chemische Fabrik auf Actien, vorm. E. Schering, Berlin (Schering & Glatz, New York.)

LAC BISMO.

A mixture said to consist of bismuth hydroxide and bismuth subcarbonate, suspended in water, in a finely divided state, and containing 0.16 Gm. (2½ grains) of the salts in 4 Cc. (1 fluidram).

Dosage.—4 to 16 Cc. (1 to 4 fluidrams) as directed. Prepared by E. J. Hart & Co., Ltd., New Orleans, La.

LACTOPHENIN.

Lactophenin, $C_9H_9(OC_2H_5)(NH.CH_3.CHOH.CO)=C_{11}H_{15}NO_8$, is a compound differing from acetphenetidin (phenacetin) in that the acetic acid group is replaced by the lactic acid group, $(CH_3CHOH.CO)$.

Actions and Uses.—The effects of lactophenin are similar to those of acetphenetidin (phenacetin), over which it possesses the advantage of greater solubility in water. Dosage.—0.5 to 1 Gm. (8 to 15 grains), in wafers or capsules. Manufactured by Chem. Fabrik, vorm. Goldenberg, Geromont & Co.

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ADVANCE ANNOUNCEMENT

READY IN THREE MONTHS

LEXER-BEVAN

General Surgery By Dr. Erich Lexer, Professor in the University of Konigsberg. Edited with many additions by Arthur Dean Bevan, M. D., Professor of Surgery, Rush Medical College, Chicago.

FOOTE

Minor Surgery By Edward Milton Foote, M. A., M. D., Instructor in Surgery, College of Physicians and Surgeons (Columbia University) and Lecturer on Surgery, New York Polyclinic Medical School.

BAUMANN

Diagnosis and Treatment of Gonorrhea —By Frederick Baumann, M. D., Instructor in Dermatology and Venereal Diseases, College of Physicians and Surgeons, Chicago.

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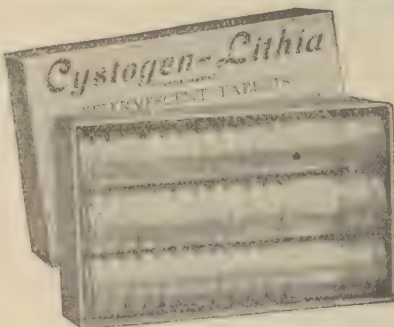
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BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION.

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SEPTEMBER, 1907.

\$2.00 YEARLY.

OUR OCTOBER SESSION.

The Annual Session of the Kentucky State Medical Association promises to be the largest and best gathering of medical men ever convened in our State. That the arrangements for the out-of-town members will be complete and satisfactory is evidenced by the roster of the committees appointed by the Jefferson County Medical Society: Dr. R. Alex. Bate, as Chairman of the Executive Committee is leaving no stone unturned to make the practical arrangements so complete that the scientific and business program can be carried out to the best possible effect. The fact that our great national leader, Dr. George H. Simmons, the Editor of the Journal of the American Medical Association, will deliver an address on "What the American Medical Association Stands For," would be a sufficient attraction in itself to cause the assemblage in the Falls City of as many Kentucky physicians as could possibly gather together. A feast of other good things await them. Dr. J. B. Marvin has kindly consented to make a stereoscopic demonstration of the Opsonic Index. Papers already promised for the scientific program insure its interest.

The program will be published in full in the OCTOBER JOURNAL, as well as full reports of all the officers, so that members contemplating attending the meeting may be fully informed as to what will be considered.

Be sure to arrange to give the fifteenth, sixteenth and seventeenth of October to the cause of modern scientific medicine.

OFFICIAL ANNOUNCEMENT

THE COMMITTEES FOR THE LOUISVILLE MEETING.

President S. J. Meyers, of the Jefferson

County Medical Society, announces the following chairmen of the various sub-committees of the Committee on Arrangements for the 52nd Annual Session which will be held at the Galt House in Louisville. The House of Delegates will meet at 7:30 P. M., October 14th, the first General Session convening the morning of the 15th.

Chairman Committee on Arrangements—R. Alexander Bate.

Chairman Ladies' Reception Committee—Anna Lawrence.

Chairman Reception Committee—Ellis Duncan.

Chairman Finance Committee—Chas. G. Lucas.

Chairman Committee on Badges—Dunning S. Wilson; members, H. T. Liggett, and Fred L. Koontz.

Chairman Committee on Clinics—Chas. W. Hibbett.

Chairman Committee on Exhibits—Henry E. Tuley.

Chairman Committee on Hotels—W. O. Green.

A NOTABLE VICTORY.

The announcement received generally throughout the State that, following the final action by the House of Delegates of the A. M. A. at Atlantic City on the question of insurance examination fees, the minimum \$5.00 fee had been restored by two of the largest companies in New York, means a notable victory for medical organization. Every thoughtful physician will know that such concert of action as brought about this result would have been impossible, had it not been for the reorganization of the parent organization at St. Paul in 1901, making it and the State Associations pure democracies by making all higher bodies depend-

ent upon the active physicians who make up the county societies.

The gain, in this instance, is more than the matter of dollars and cents involved. The right of the *profession* to be consulted in business matters affecting *its* interests, was tested, and is vindicated, for the first time.

The splendid concentration of the units of our organization from Maine to California presages much for the future of all those branches of professional activity in which not only all physicians but also all the people are interested. There could be but one result to the insurance fee fight, as we were in the right in our demand for competent examiners and a decent minimum fee.

In a similar way, and in an even larger sense, provided we stand together in every county, are we bound to succeed in our organized fight against nostrums and worthless proprietaries. In this war, as an incident, is the demand that medical journals, by whomsoever or whatsoever conducted, shall clean their advertising and reading pages of fraud. In these matters our organization is right, and there is no more question about our ultimate success in them, than there was in the question of insurance fees from the moment the organized profession was awakened to its importance.

WHAT REMAINS TO BE DONE.

In the matter of insurance fees, following the recent announcement of the restoration of the standard fee by the Mutual Life and the Equitable, it is of especial importance that members of the profession should not forget the debt of gratitude we owe to those companies which never wavered in the matter. We Kentuckians feel an especial pride that our four companies, the Citizens, the Commonwealth, the Inter-Southern and the Business Men's, have stood with the profession and for its best interests from the first.

It is of equal importance to remember that all of the fight is not won. The New York Life, the originator of the cheap examiner, and some of its smaller imitators will doubtless attempt to continue to work under the graded schedule. The fight for the standard fee was begun here in Kentucky by that splendid pioneer organization, the Muldraugh's Hill Medical Society, against the New York Life years ago. The Kentucky resolutions, unanimously adopted at Owensboro less than a year ago, were sent officially to every county society in the United States. Adopted and endorsed almost unanimously all over the country, it is of es-

pecial importance now that we stand firmly by our rights in every county in the grand old Commonwealth. Bring every proper suasion to bear on the physicians of your county that the companies that have failed to restore the fee, and especially the New York Life, may also fail to secure a competent life insurance examiner.

ARE YOU A DELEGATE?

The most exalted office within the gift of any county society is its secretary. He must work the whole year or his society is a failure. Of scarcely less importance are the Delegates, specially chosen by their fellows to represent them in the House of Delegates of the State Association. This year especially many matters of the utmost practical interest and importance both to our profession and people will be laid before that body. Full reports of all officers and committees will appear in the October JOURNAL. Whether you are a Delegate or not, read all of them, as they are published for the information of every member. The House of Delegates will meet at the Galt House, in Louisville, on Monday, October 14th, at 7:30 P. M. Be sure that the duly elected Delegate from your county will be present.

THE NEW COURSE OF STUDY READY.

The Course of Postgraduate Study as planned by the American Medical Association, mention of which was made in these columns last month, is now ready for distribution by the A. M. A. JOURNAL office. We print in this issue the elaborated course for the first month. It consists of four yearly courses, divided into subjects for Weekly Meetings. The subject for each weekly meeting is still further divided, that it may be assigned to two or more teachers or leaders, as shown in the skeleton program on page 11 of this issue. This program may be utilized by any County Secretary for his local society by assigning to members the different subjects in accordance with their tastes and gifts.

In any society experience will soon show whether it is better to assign the subjects in rotation or to place certain men on as leaders in certain subjects for a period of say three or four months.

Each leader will find in the "Elaborated Weekly Course" the points of special interest he is expected to bring out and emphasize in presenting his subject. The success of the meetings will depend almost entirely on the punctuality and especially upon the thoroughness of preparation of the leaders.

At the outset it may be expected that the burden of the work will fall on the few, who are willing to devote the time and study necessary for the proper preparation. The chief compensation will be theirs also, as they in turn will become the greatest beneficiaries of the work.

It will be noted that the elementary branches, anatomy, physiology, chemistry and bacteriology, are given much attention, since a familiarity with these is essential to a thorough understanding of any of the subjects.

The Anatomy may always be more clearly demonstrated by the use of fresh specimens from the lower animals, if those from the human are not available.

Under the head of "Treatment" in any subject the materia medica should be studied in conjunction with the physiologic and therapeutic actions of the particular drug, exhibiting always the crude drug and its U. S. P. and N. F. preparations. Much attention should also be given to the neglected art of prescription writing, the blackboard being often used for this purpose.

Arrangements are being made whereby societies may secure histologic, pathologic and bacteriologic specimens, stained and mounted, at a reasonable cost.

It is insisted that there should be a "Reporter" for every society, whose duty it shall be to present a digest or review of the recent literature of the subject of study for that month.

The course is arranged for one meeting each week, preferably Monday or Tuesday evening, beginning the first of September. For those societies which at present hold only monthly meetings there is appended the "Regular Monthly Meeting" program which is intended to review, in a way, the work done in the weekly meetings, bringing out particularly the clinical side of the subjects. In these societies the members should be encouraged to use the weekly programs as a "reading course" as preparation for the discussion of the subject for the Monthly Meeting.

The A. M. A. will publish the course in pamphlet form, and will keep it set up, as was done for the Constitution and By-Laws of County Societies, so that special programs for any county society with names of teachers and officers, may be furnished at nominal cost.

Finally, it is suggested that this course is outlined for the "average" County Society, rather than for those of the large cities, and it is expected that with the helpful criticisms and suggestions of those who voluntarily

take up the work, the course can soon be made almost ideal.

SCIENTIFIC EDITORIALS.

SPIRITUS GLYCERYLIS NITRATIS. (U. S. P.) — SPIRITUS GLONOI. (Pharm. 1890).—SPIRIT OF NITROGLYCERINE.

VIRGIL E. SIMPSON.

Description and properties:—A clear, colorless, alcoholic solution with 1 per cent. by weight, of Glyceryl Trinitrate. It should be dispensed, packed and transported with care as it is an explosive. If spilled by accident a solution of potassium hydroxid should at once be poured over it to effect decomposition. Dose:—0.05 cc (1 minim).

Tabellae Trinitrini (B. P.):—Tablets of nitroglycerine made of chocolate and containing 0.6 mg. (1-100 gr.). Nitroglycerine in tablets decomposes much more rapidly than the alcoholic solution and the latter is to be preferred. Dose, 1 tablet.

Nitroglycerine is prepared by treating glycerine with nitric and sulphuric acids. It is a pale, yellow oil, insoluble in water, soluble in alcohol; burns in an open vessel, but heated to 250 C or by concussion explodes violently. *Dynamite* is infusorial earth impregnated with nitroglycerine.

The group, nitrites, belong to the inorganic salts. The radical N O is attached to the metal or alkyl through an O atom and the O NO is the chief constituent. The metallic nitrates are very much unlike the nitrites in effects, though allied chemically; some of them when put in contact with organic matter are reduced and nitrites are formed. The so-called *nitroglycerine* is the most familiar of these and is reduced by the action of alkalis into nitrites and nitrates, the latter possessing no influence in such small quantities. It is to the nitrite formed that practically all the influence of nitroglycerine, which is really the nitrate of glycerine, is due. (It must be mentioned, however, that Marshall and others have claimed that grounds for belief that reduction to nitrites in tissues occurs, do not exist and that nitroglycerine acts as such.) The difference between nitroglycerine and the other organic nitrates which form nitrites in the body is chiefly in the rapidity of the former's conversion (Cushny).

PHARMACOLOGICAL ACTION.

Circulatory System:—The peripheral vessels, both arterial and venous, are rapidly and decidedly dilated. The vessels of the

head and neck and abdominal organs are most markedly affected, though the flush may extend over the trunk. The meningeal vessels are also dilated with the accompanying throbbing of the temporal vessels, headache, oppression, giddiness and some confusion of ideas. Darwin first called attention to the fact that the blush corresponded to the blush of emotion. There has been no completely satisfactory explanation of this peculiarity, though other facts indicate that with reference to drug action and innervation the vessels of the head and neck occupy an exceptional position.

Now as to the *cause* of the vaso-constrictor or paralysis produced by the drug. It is claimed by some observers that the vaso-constrictor centers of the brain are depressed directly. While it is possibly true that the cerebral centers are concerned since the peculiar distribution and prompt occurrence point to central origin, yet that an unimportant part in the vaso dilation is so played can be shown by the absence of a fall of pressure if a nitrate be introduced into the cerebral circulation and prevented from entering the general circulation. Such direct action of drugs on the brain can be observed in animals if the cerebral vessels be ligated and resorting to artificial perfusion with a defibrinated blood to which the drug has been added. The cause then must be looked for in the vessel walls. It is uncertain whether the action is on the muscles or the nerve endings in the walls. A fall in arterial pressure accompanies and follows dilatation and is dependent entirely upon it, since the possible effect of the heart's changes in rate and force may be eliminated by the use of atropine. The effect of vaso dilation can then be demonstrated by inspection, by plethysmographic measurements, and by the increased rate of flow through the vessels. Dilation will occur after the cord is destroyed, in organs that have been excised and after a degeneration of the cervical ganglia. And the fairly satisfactory evidence that the drug's action is manifested in the vessel walls can be established by passing blood into an artery of an amputated extremity of an animal and measure the amount coming from the vein; then add nitroglycerine to the perfused blood and the outflow will be promptly increased, though no nervous mechanism is concerned. Again it must be noted that the depression producing the dilation does not result in complete paralysis since a stimulation of the splanchnics will cause a rise in tension; since the splanchnic is a constrictor nerve and a rise in tension following its stimulation shows it to be intact it must be con-

cluded that nitroglycerine produces dilatation of vessels chiefly by its influence on the unstriated *musculature* of the vessel walls. Another effect of the drug on the circulatory system is an increased prominence of the dicrotic wave. While the arterial pressure is diminished the venous is increased. The pulmonary vessels are dilated though to a less extent than the general circulation and, as a consequence, the tension is increased in the pulmonary vessels (Plumier, 1905). The pulse is compressible and the blood pressure waves are smaller because each is dissipated more rapidly on account of the dilatation; as the arteries are more completely emptied during each diastole the pulse may be bounding.

Heart action is considerably accelerated by the drug. The increased rapidity is due (a) to the diminished peripheral resistance and (b) to the direct depression of the vagus center. The increase is notably greatest in those animals whose vagi are normally active. It is practically abolished by the previous administration of atropine. That the increased rate is due to direct action of the nitrate on the vagus center lessening its influence and permitting the sympathetic to act with less opposition is proven by the presence of such effect when the drug is confined to the cerebral circulation and its absence when limited to the general circulation as explained above. When the vagi have been depressed prior to the administration of the drug there is generally no further acceleration. As a result of experiments on excised mammalian hearts it is concluded that ordinary doses do not affect the normal heart muscles. In larger quantities besides the depression of the inhibitory center there obtains a direct depressing effect on the cardiac muscle weakening the contractions. In ordinary dosage the coronary arteries are dilated and the excursions of the heart are rendered smaller. Toxic doses increase the depression to a termination in failure of heart action, it being arrested during systole. The indirect effect noticed on an overworked heart in certain pathological conditions comes by a relief from excessive resistance; the drug is not a cardiac stimulant.

In toxic doses oxidation in the blood is much diminished and it assumes a chocolate color both in the body and in the test tubes. This alteration in color is not due to the formation of any compound by the nitrites, but to the conversion of hemoglobin into methemoglobin and nitric oxide hemaglobin compounds. The nitrites are unlike other methemoglobin formers in that they do not destroy the structure of the corpuscle, and con-

sequently only act by retardation of oxidation. (This phenomena may explain persistent glycosurias sometimes seen). When the tissues become oxygen starved they can break up the methemoglobin as it is less stable than CO. The formation of methemoglobin bears no relation to the action on the vessel walls by the nitrites.

Nervous System:—Reference has necessarily been made to certain action on parts of the nervous system when describing the effects on the heart and blood vessels, and need not be repeated.

Practically no effect is noted on the higher centers; the throbbing and confusion of ideas being due to the dilated blood vessels. The reflex excitability is diminished and there is some depression of the motor areas of the brain and cord. The peripheral nerves seem unaffected even in large doses since as long as a given muscle will contract by direct stimulation, contraction can be elicited also by stimulation of the motor nerve. Its action is more pronounced on non-striated than on striated muscle fibres.

The sight may be curiously affected, a yellow ring surrounding a dark object on a white back-ground. The retinal vessels are dilated and a hyperemia of the papilla; these produce the chromatopsia and visual hallucinations, all of which are transitory.

Convulsions may occur after large doses; they are of central origin and may be due to direct action of the nerve cells, though some observers consider them due to cerebral anemia.

Respiratory System:—The movements are generally increased and the range of expansion greater. The respiratory center in the medulla produces this activity chiefly as a result of accumulation of CO₂ in the blood vessels; the amount of blood is augmented in the lung through accumulation in the venous side of the circulation. Slow and labored respiration results from large dosage, due to a depression of the center and an arrest of the oxygenating function of the blood. Toxic doses generally cause death by paralysis of this center. The action of nitroglycerine, then, on the respiration may be due to stimulation of the central nervous system, but is more likely only secondary to changes in the blood and the circulation.

Genito-Urinary System:—While the urine is generally increased it is not uniformly so. Anuria will occasionally follow large dosage. These different effects are all due to changes in calibre of blood vessels; when contracted, a small amount may dilate them and a maximal excretion follow, while it may lessen the urine by lowering the general blood pressure

when the normal calibre is optimal. Large doses almost invariably diminish the activity of the renal epithelium in consequence of a markedly lowered blood pressure. In other words the variations in the amount of urine are apparently secondary and depend on whether the renal arterioles or those of the general system are relatively more dilated; if the former, the urine is increased; if the latter, it is diminished.

Absorption and Elimination:—When administered per orem nitro-glycerine differs from the nitrites and the other nitrite producing substances in that it is not decomposed in the stomach, being broken up only in the alkaline fluids of the bowel or in the blood. In either of these media it breaks up rapidly into glycerine, nitrites and nitrates in proportion of two of the ites and one of the ates. This speedy dissolution permits of rapid action, its effects beginning in about three minutes. Its greater activity as compared with the metallic nitrates is due to this unchanged condition until reaching alkaline fluids and then breaking up at once; the latter drugs are decomposed in the stomach and much of the nitrous acid is lost. (Cushny). The drug is not wholly broken up in the body since it has been found as nitroglycerine in the urine.

Summary of Action:—(a) Depression of the vaso motor mechanism, chiefly peripheral.

(b) Depression of the pneumogastric center, leaving sympathetic unopposed in the heart.

(c) Slow paralysis of the muscle cells with which it comes in contact; most noticeable on the involuntary variety.

(d) The formation of methemoglobin.

(e) Acceleration of the respiration, largely dependent on the circulatory changes.

Therapeutical Application:—It must be remembered that the drug is not a cardiac stimulant in a strict pharmacological sense, and that whatever good effects result from its use are not due to a direct action on the heart, but rather by diminishing resistance against which systole is performed. Also if the resistance is not increased, but the heart is too weak to drive the blood through normal vessels it would cause a further lowering of tension and if the tension were dangerously low already, it would be contraindicated if used alone but might be of temporary service if combined with or preferably preceded by, strychnine or digitalis to augment the working power of the heart muscle. When, however, a rise of pressure exists due to nervous contraction of vessels as in some anginas or in strychnine poisoning it gives certain relief; or it may be

given with digitalis to prevent the latter from causing undesired constriction of the vessels. Any condition showing a high tension pulse, marked elastic oscillations and a weak diastolic wave is dangerous since the increased resistance means extra work on the heart. Such conditions are observed in arterio sclerosis, angina pectoris, nephritis and drug poisoning such as lead, digitalis, nuxvomica and barium. Nitroglycerine, by dilating the vessels and lessening the resistance, may thus assist in securing a more complete contraction of the ventricle and increasing the output of the heart. If, however, the resistance is due to a fibrous thickening of the vessel walls, lessening the lumen, and, if the muscle structure has largely disappeared, it naturally ceases to be effective. It also does little good in the angina with a coronary sclerosis. While in the early stages of arterio-sclerosis it is beneficial, in neither this affection nor in angina must it be considered curative. Used with a proper appreciation of its capabilities for both good and bad, and of the pathological conditions to be combatted, it may be highly useful in pneumonia.

Osler states that under prolonged administration in locomotor ataxia it lessens the frequency of the crises and relieves the neuralgic pains. Butler considers it of much value in congestive dysmenorrhoea. In valvular disease with fatty degeneration the cardiac muscle can not with safety be markedly stimulated; nitroglycerine, as a last resort, gives some relief not infrequently, but can, of course, never cure.

In chloroform narcosis the heart is depressed and the tension practically zero. Remembering the action of the drug, its frequent and indiscriminate use here may justly be questioned. Also in respiratory failure, partly due to anemia of the central nervous system its use is irrational. Recovery from both the above conditions is obtained, it would seem, in spite of the treatment.

Hoffman recommends the following in cardiac asthma:

R Glycerylis Trinitratis . . . gr.1-100
 Tinct Digitalis
 Tinct. Strophanthiā ā m ii,
 Tinct. Belladonnaem i
 M. ft. Tab. No. I. Sig.—One such
 tablet every 6 hours.

The effects of nitroglycerine may persist several days after its discontinuance. An acquired tolerance to the drug is not infrequent. Murrell states that the explosive properties are unduly feared and that a 1% solution is perfectly safe.

The therapeutic uses may be grouped under a few heads, thus:

- (a) Abnormal resistance to cardiac work.
- (b) Arterial spasm.
- (c) Toxic rise of pressure.

BIBLIOGRAPHY.

- Butler:—Text. 1906.
 Brunton:—Jour. Anat. & Phys. V.P.92.
 Curtis:—Reference Handbook of Med. Sciences. Vol. V.
 Cushny:—Pharmacology. 1906.
 Gamgee:—Phil. Trans. of Royal Soc. 184 B.
 Hay:—Practitioner. XXX.
 Laws:—A.M.A. XXXI.
 Marshall:—Jour. of Phys. 1879. p. 385.
 Sollman:—Pharmacology. 1906.
 Wood:—Amer. Jour. of Med. Sciences, LXI.

THE CONDUCT OF LABOR.

By EDWARD SPEIDEL, LOUISVILLE.

THE THIRD STAGE.

This stage is generally defined as the delivery of the placenta and membranes. It should include the full retraction of the uterus for no delivery has been safely terminated, if the physician does not see to it, that the uterus is firmly contracted, before he leaves the house.

As a general thing the delivery of the placenta is no longer left to nature, for it has been found that in most cases, a very long time would elapse before it would be expelled. "Ahlfeld" states that in only 13% of cases did the placenta come away naturally after waiting 1 1-2 to 2 hours.

It is customary, in consequence to resort to the Credé method of placenta expression. Unfortunately in most instances this is employed too early, before the uterus has regained its tone and in consequence futile attempts are often made to force the placenta out of a uterus that will not contract firmly, or if successful, the placenta is expelled from a uterus that will not then remain firmly contracted and a dangerous post partem hemorrhage may occur.

Before his death Credé, the originator of the method, called especial attention to the fact that 30 minutes should elapse before an attempt is made to use his method.

Williams advocates watching for a distinct sign which indicates that the placenta has loosened from the uterine wall and slipped into the lower segment.

If the physician keeps his hand upon the fundus of the uterus after the birth of the child, he will notice at varying intervals but generally about twenty minutes after the birth, that the uterus suddenly elongates,

pushing the hand up fully two inches. This is the indication, that the placenta has slipped from its attachment into the lower segment and that the uterus is ready for the Credé expression.

After the baby is born it must be placed in some convenient place near the mother until the cord is severed. The place generally selected for this purpose, in the bed between the legs of the mother, is neither desirable nor convenient. If the delivery has been with the patient's hips resting on a draw sheet or bran bag, then this region is wet and soiled with the discharges of the labor. If a Kelly pad or obstetrical cushion has been used, then if the cord is short, the baby will again have to lie in the mess that has collected in the pad during labor, if the cord is longer, then at best it will have to be balanced upon the inflated rim. In either instance, if in the interval there should be a sudden discharge of blood from the uterus, then the baby will be directly in line to receive the brunt of it.

For a number of years the writer has used the position on the abdomen of the mother, between the symphysis and the umbilicus. In this position the child is entirely free from the discharges that have accumulated during the labor, the further manipulations can be conducted conveniently and in full sight and the weight of the baby on the abdomen will prevent a post partem hemorrhage. The warmed baby blanket has been placed upon mother's abdomen and the child placed between it. It should be laid upon its right side, because this position favors the closure of the foramen ovale. It should be so placed that the hips are a little higher than the head in order that any fluids that have gained access to the trachea may drain away.

Whilst waiting for the cord to stop pulsating, the eyes should be treated after the Credé method. The eyelids are first mopped with a warm boric acid solution by wiping from the inner canthus to the outer, then the lids are separated with the thumb and index finger of the left hand and a drop of 2% solution of nitrate of silver is placed into each eye. After thirty seconds the eyes are gently irrigated with pledgets of cotton wet with normal saline solution. Edgar has made extensive experiments with the newer silver preparations, argyrol, protargol, etc., and has proven that although they are not as irritating to the eye as nitrate of silver, none of them is as effective as the original silver salt.

This treatment of the eyes should be instituted in every case as experience will soon demonstrate that the gonococcus of Neisser

lurks in most unexpected quarters. In some localities it is a legal requirement and no doubt from a medico legal standpoint a physician would have great difficulty in defending himself from a suit for malpractice growing out of a neglect of this precaution.

The cord is not tied until it has ceased to pulsate, because in consequence, several ounces more of blood are carried into the fetus that would be lost by immediate ligation.

Experiments by Williams have fully demonstrated this fact. A baby weighed immediately after birth and then after the cord has stopped pulsating, will show an increase of 3 ounces, on an average in weight. An increase that could only be ascribed to the additional amount of blood drawn from the placenta into the child in this interval.

It is customary and advisable to cut the cord short. One and a half inches, however, should be the limit as a satisfactory dressing can scarcely be applied to a shorter stump. Corded silk ligatures of medium thickness had best be used, one ligature being tied 1-2 inches from the baby's abdomen, the other ligature a convenient distance beyond. This first ligature should be tied with the same care and in the same manner as tying off a pedicle in the pelvic cavity. A surgeon's knot securely placed by pressure made by bringing the backs of the thumbs in apposition, a single knot on top of this, then carrying the ligature around the other side and again tying. In cutting the cord beyond the first ligature, it should not be cut straight across, but should be snipped around the circumference in order to leave a broad pedicle.

While the nurse is giving the baby further attentions, the physician examines the perineum, with absolute exposure of the vulva and with a good light. The index finger of the right hand should be inserted into the rectum and the labia separated with the thumb and index finger of the left hand. In this way a tear will be readily recognized and the extent of the injury can be noted.

The tear should be repaired at once. The tissues are benumbed from the pressure that has been exerted upon them in the second stage and no anesthetic will be needed unless the laceration be very extensive.

If the physician has equipped himself as recommended in the article "The Armamentarium of the Obstetrician" published in the March, 1907, number of this Journal then he will be ready to perform the operation at once, if not then his instruments must first be sterilized.

The patient should be brought to the side of the bed, the parts cleansed thoroughly, a

pad of sterile gauze pushed up into the vagina to prevent soiling of the field during the operation.

The index finger of the left hand is now introduced into the rectum, as a guide, a silk worm gut suture on a curved needle is inserted on one side, making a circular sweep and coming out at the bottom of the wound, it is reintroduced and catches the structures on the other side and comes out at a point opposite the first insertion. Three or four sutures at proper intervals generally suffice. The suture ends are all clamped in one artery forceps and the pad of gauze is removed.

After the placenta is expelled, the area is freed from blood clots and the sutures either tied or clamped with perforated shot. The latter is the better procedure. Many failures in securing a union after an immediate perineorrhaphy are due to the fact that the sutures are tied too tightly. This may be prevented, if held by perforated bullets, especially if two are placed upon each suture. In such a case only the second bullet is compressed, the wound is inspected in twenty-four hours and if the sutures are not tight enough after the swelling has subsided then the first bullet is pushed forward as far as necessary and clamped. The sutures should be cut two inches long, as in that way they will cause the patient less discomfort than if cut short. A half hour having elapsed, the physician should then proceed to deliver the placenta. A clean basin is placed between the legs of the patient, the vulva is exposed, the clean right hand is held ready to catch the placenta as it escapes from the vulva, while the left hand is placed upon the abdomen. The abdomen is so flabby and the rectus muscles are so relaxed, that the hand passing down between them can readily touch the spine. The left hand is now placed over the fundus of the uterus, the fingers going behind and the thumb on the anterior surface. If the uterus is not firmly contracted, then it should be teased by a lateral movement of the hand and when it feels firm, the left hand pushes and at the same time squeezes the uterus in a direction toward the tip of the coccyx. This is the important part of the procedure. When the operator is unsuccessful, it is generally due to one of three things, either he has not waited long enough, the uterus was not firmly contracted when he performed the manipulation or he pushed in the wrong direction. Pushing towards the symphysis pubes bends the uterus forward and practically imprisons the placenta. If the procedure has been conducted properly, then there is a sudden distention of the vulva and the placental mass is caught in the right

hand. The membranes however are usually held tight in consequence of the fact that the expulsion of the placenta is followed by a firm contraction of the uterus and the membranes as they are about to slip out, are caught in the firm contraction of the cervix. Any injudicious tugging at them at this time will simply result in a considerable portion being torn off and left in the uterus to cause considerable trouble later on in the puerperium if not detected and removed at once. A better procedure is to simply wait for three to five minutes to give the uterus time to relax, then by turning the placenta and twisting the membranes into a rope, they will generally slip out of the vulva intact.

The basin with its contents, should then be taken to a good light and inspected very carefully, the circumference of the placental mass should be examined, any torn surfaces suggesting the probable separation of a placenta succenturiata.

The membranes should be lifted up, so that any defect in the bag, except at the site of rupture may be noticed. It is worth while to spend some time in this careful examination, for the physician can then rest assured, if he has a fever later on in the puerperium, that there is no possibility at least of its being due to retained secundines. Whether or not to administer ergot, that is the question. In a normal labor if the uterus has been emptied properly and completely, it will remain firmly contracted and there is no necessity for its use. If the third stage has not been conducted properly, it is a question whether a single dose of ergot, given by the mouth, will prevent a post partum hemorrhage. It relieves the mind of the physician, however, and as no harm can be done by it, there can be no objection to the use of a single dose of ergot, at the end of the third stage of labor.

The following extracts from the latest text books in regard to the use of ergot, may prove interesting.

"Ergot is always likely to do harm and is especially dangerous in cases of prolonged labor. As to its administration in the second stage of labor in a fairly large proportion of cases, it is probable that it does little harm or good, but in certain cases it does positive harm.

If the placenta cannot be expelled in an hour, it is either adherent or retained. For adherent placenta, ergot is absolutely useless, for retained placenta, ergot is likely to do more harm than good, because it may produce a tightening of the muscular fibers near the cervix which will cause an incarceration, that is difficult to overcome." (Wright).

"Many authorities recommend the admin-

istration of a dram of fluid extract of ergot by the mouth, immediately after the expulsion of the placenta as a prophylactic measure against post-partem hemorrhage. This is usually unnecessary, as the drug is only called for in those cases in which the uterus remains soft and flabby. Its administration in the third stage of labor, before the expulsion of the placenta, cannot be too strongly deprecated as the resulting tetanic contraction tends rather to produce a further retention, so that not infrequently a manual removal becomes imperative." (Williams).

"The routine administration of ergot after labor has been accomplished without any indication for its use, is to be deprecated." (Peterson).

"In perfectly normal patients, it may not be necessary to give ergot immediately after labor, as the uterus will contract without it. It is however a safe precaution to give a teaspoonful of fluid extract of ergot, when the uterus has been emptied." (Davis).

"If the retraction of the uterus should not be entirely satisfactory after it is emptied, and manipulations and the Credé method have not induced contraction, fluid extract of ergot may be given by the mouth or subcutaneously. Ergot used after the uterus is empty, is useful as a preventative, not only of post partem hemorrhage specially in multipara and atonic cases, but of sepsis and as an aid to involution, and in the prevention of after pains. I know of no valid objection to the use of one or two doses of ergot after confinement, the drug adds materially to the safety and comfort of the patient." (Edgar).

EXAMINATION QUESTIONS OF THE KENTUCKY STATE BOARD OF HEALTH,

AUG. 1, 1907.

Preventive Medicine.

1. How long after recovery would you keep in quarantine a case of (a) diphtheria, (b) scarlet fever, (c) small-pox?
2. Name the portals of entry of tubercular infection in the order of their importance.
3. Describe in detail just how you would manage cases of typhoid fever for the protection of the community.
4. How would you disinfect a room after a communicable disease?
5. What is the difference between contagion and otology?

Otology.

1. What is Politzer's method of inflating the tympanum, and how is it accomplished?
2. Define tinnitus aurium and give the cause of it.

3. Give etiology, symptoms and diagnosis of acute otitis media.

4. What is the pyramid of light and where would you expect to find it?

5. Give symptoms, etiology and probable serious results of mastiditis.

Medical Jurisprudence.

1. What constitutes expert testimony?
2. How would you determine that a full term dead baby was born alive?
3. (a) How would you determine that a wound was inflicted by a blunt instrument? (b) Or that it was done before or after death?
4. Differentiate between idiocy and lunacy.
5. What is paresis? Give symptoms, prognosis and treatment.

Nervous Diseases.

1. Give etiology, diagnosis and treatment of migraine.
2. Give etiology, symptoms and treatment of sciatica.
3. Describe (a) epilepsy, (b) catilepsy.
4. Describe a case of progressive bulbar paralysis.
5. Differentiate between (a) illusions, (b) delusions, (c) hallucinations.

Ophthalmology.

1. Differentiate iritis and glaucoma, giving symptoms of each.
2. Describe and give etiology of (a) phlyctenular keratitis and (b) interstitial keratitis.
3. What is ophthalmia neonatorum? Give etiology and the probable results of a badly managed case.
4. Give symptoms and etiology of ciliary blepharitis.
5. Differentiate myopia from hyperopia and hypermetropia, and give the anatomical reasons for their existence, and tell what you would recommend for the relief of each.

Practice.

1. Define constipation, give symptoms and non-medicinal treatment.
2. Give etiology, varieties and diagnosis of vertigo.
3. Give etiology, diagnosis and prognosis of myxedema.
4. Give etiology, diagnosis and prognosis of hydrothorax.
5. Give etiology, diagnosis and prognosis of angina pectoris.
6. Give etiology, diagnosis and prognosis of asthma.
7. Give etiology, symptoms and dangers of adenoids.
8. Give etiology, diagnosis and non-medical management of entero-colitis in a child.
9. Give essentials for the production and preservation of pure dairy milk.
10. Give etiology, diagnosis and prognosis of meningitis in a child.

Obstetrics and Gynecology.

1. Define (a) presentation, and (b) position.
2. Tell exactly how you would manage a shoulder presentation.
3. (a) What is mensuration? (b) How is it conducted in obstetric cases? (c) How is it of value?
4. How would you diagnose, and how conduct the delivery of a hydrocephalic foetus?
5. (a) What would you suspect in ante partum hemorrhage? (b) How confirm your diagnosis? (c) How manage the case?
6. (a) When is a ventro-fixation indicated? (b) What is a ballotement, (c) when is it available and how is it performed?
7. Give the diagnosis of extra-uterine gestation.
8. Give the symptoms and pathology of carcinoma uteri.
9. Describe the ovary and uterus during each stage of the menstrual cycle.
10. (a) Give two indications for hysterectomy. (b) Give reasons for preferring abdominal or vaginal method.

Surgery.

1. Give the varieties of hernia, and describe one operation for inguinal hernia.
2. (a) Name the different kind of fractures and give differential diagnosis between fracture of neck of femur and dislocation of hip. (b) Give treatment of the latter.
3. How would you make a diagnosis of gonorrhoea? Describe in detail any bacteriological examination you would make.
4. What is empyema? Give diagnosis, prognosis and treatment.
5. Give symptoms, diagnosis and treatment of intestinal obstruction.
6. How would you diagnose retention of urine? What would you do for it?
7. How would you determine that a limb was injured beyond hope in a crushing accident?
8. What are the indications for an appendectomy?
9. Give the treatment of shock resulting from hemorrhage.
10. Give the contra-indications to the employment of ether and chloroform.

Physiology.

1. (a) Give the several varieties of food. (b) Which enzymes act on each variety?
2. (a) Describe absorption and give the function of the lymphatics. (b) Describe the thoracic duct.
3. Give chemistry and uses of bile.
4. (a) Describe the circulation of the blood. (b) What forces govern it?
5. Give the histology of the kidney with the functions of the various structures.
6. Name and give the functions of each of the cranial nerves.

7. Describe and give functions of sympathetic nervous system.

8. What is the function of the skin?

9. Describe the blood.

10. Describe the cardiac cycle.

Anatomy.

1. Describe (a) the gracilis, (b) gastrocnemius, and (c) rectus-femoris, giving origin and insertion of each.
2. Describe the pancreas.
3. Name the structure to be divided in operating for strangulation of an oblique inguinal hernia.
4. Describe the third cervical, and distinguish it from the fourth dorsal vertebra.
5. Bound the axilla and name and give relations of structures in the axillary space.
6. Name the muscles, nerves and arteries severed by cross section of the thigh at the junction of the middle with the lower third.
7. Describe (a) superficial and deep palmar arches, (b) bronchial artery, its branches and relationship.
8. Describe and give contents and relations of parts in Scarpa's triangle.
9. Describe (a) the superior longitudinal sinus, (b) the lateral sinus, (c) the torcular Herophili.
10. Give the anatomy of the liver.

Chemistry.

1. What is (a) an atom, (b) a molecule, (c) what are isomeric compounds?
2. (a) What are the symptoms of acute arsenic poisoning? (b) What is the chemical combination of its antidote and how does it act? (c) Tell in detail how to detect arsenic in the stomach of a case of suspected poisoning.
3. Describe in detail a method for the quantitative estimation of sugar in urine.
4. Tell in detail how to detect bile in urine.
5. (a) Contrast dairy milk with human milk, and (b) give a brief description of the essentials for the production of pure dairy milk.
6. What is (a) H_2SO_4 (b) Ba O_2 (c) H Cl (d) HNO_3 (e) What is the formula of methyl alcohol?
7. (a) What is acetphenetidin? (b) What is hexamethylin tetramine? From what are they prepared?
8. (a) Describe oxygen. (b) Give its formula, (c) valency, (d) atomic weight, (e) Tell how to prepare it and give formula of your method.
9. (a) What is specific gravity? (b) How is it obtained for solids, (c) liquids, and (d) gases?
10. Describe the chemical changes in starch during digestion in detail, giving formulae.

Bacteriology.

1. (a) Tell in detail how you would detect

the malarial organism in blood. (b) How distinguish between the quartan and aestivoautumnal parasite?

2. (a) Describe Widal's test for typhoid fever. (b) What is its diagnostic value?

3. Differentiate between the cultures of the bacillus typhosus and the bacillus coli communis.

4. How would you examine a suspected specimen of sputum for tubercle bacilli? Give details.

5. Define (a) toxins, (b) antitoxins, (c) amoceptors, (d) bacterioprotoins, (e) lysins.

6. Give the morphology of the tetanus bacillus. What are its toxins?

7. Tell in detail how to examine a suspected urethral discharge for gonococci.

8. Discuss Ehrlich's side chain theory of immunity.

9. Differentiate between the pneumococcus and Pfeiffer's bacillus of influenza.

10. What is phagocytosis? What is 'accomplished by it'?

POST GRADUATE COURSE.

FIRST MONTH.—TUMORS.

First Weekly Meeting. September — 1907
Anatomy—Microscopic Sections.

EPITHELIAL TISSUE: — Origin, structure, cells and stroma. Varieties, simple and compound.

Shape, arrangement and distribution, (1) pavement, (2) cubical, (3) columnar and (4) ciliated. Describe ciliary motion, causes.

Transitional epithelium, arrangement, distribution and location.

Stratified epithelium, shape, arrangement and distribution.

Nutrition of epithelium. Chemistry of epithelium.

CONNECTIVE TISSUES: — Origin, structure, function.

Areola:—Distribution, structure. Microscopic appearance, cells, matrix, white and yellow fibers.

Fibrous:—Distribution, structure, functions.

Elastic:—Structure, distribution, histology.

Adipose:—Distribution, structure, function, nutrition.

Lymphoid and Retiform:—Distribution, histology.

Jelly-like:—Structure, chemistry, distribution.

Cartilage:—Varieties, structure, function, chemistry.

Bone:—Chemistry, structure (gross and microscopic), nutrition.

Blood:—Corpuscles (red and white), plasma, serum and fibrin.

MUSCULAR TISSUE:—Origin, Voluntary and involuntary.

Striated and plain. Distribution of each.

Striated, voluntary:—Epimysium, perimysium, endomysium. Sarcolemma and contractile substance. Sarcomere, sacrostyle and contraction. Attachment to tendon. Nutrition of muscle. Nerve supply.

Plain, involuntary:—Distribution. Shape, size, arrangement of cells.

Cardiac muscle:—Differs from others.

NERVOUS TISSUE:—Origin. Central and peripheral systems.

Cells and fibers, distribution.

Fibers:—Medulated — Sheath, axis cylinder, neurilemma, nuclei, nodes of Ranvier:

Non-medulated:—Transverse and longitudinal sections.

Cells:—The neuron, cell body, dendrites, axite.

Bipolar cells, distribution, function, description.

Multipolar cells, Golgi cells, two types.

Histology of the cell, staining, shape, size, etc.

Nerve degeneration and regeneration.

FIRST MONTH.—TUMORS.

Second Weekly Meeting, September — 1907.

Differential Diagnosis of Malignant and Benign Tumors:—

(1) Mobility, (2) capsule, (3) vascular supply, (4) rate of growth, (5) pain, (6) infiltration, (7) recurrence, (8) lymphatic involvement, (9) metastasis.

FIBROMA:—Gross and microscopic appearance, distribution.

LIPOMA:—Size, number, distribution, varieties, gross and microscopic appearances.

CHONDROMA: — Varieties, distribution, gross and microscopic appearances.

OSTEOMA:—Varieties, number, gross and microscopic appearances. Odontomes.

MYOMA:—Distribution, mixed tumors, gross and microscopic appearances.

MYXOMA:—Gross and microscopic appearance. Secondary changes.

NEUROMA: — Pathology, number, distribution. Ganglionic neuroma. Neurofibromatosis. Mol-luseum fibrosum.

GLIOMA:—Microscopic changes.

FIRST MONTH.—TUMORS.

Third Weekly Meeting September — 1907.

ANGIOMA:—Structure.

Simple Nevus:—Varieties, structure of each, distribution.

Cavernous nevus:—Structure, distribution, prognosis.

Plexiform angioma:—Structure, distribution.

LYMPHANGIOMA:—Structure.

Lymphatic nevus:—Microscopic changes, distribution.

Cavernous lymphangioma:—Structure.

Lymphatic cysts:—Structure, occurrence, distribution, prognosis.

SARCOMA:—Structure, varieties.

Round-celled sarcoma: — Microscopic section, distribution, age, prognosis.

Lymphosarcoma: — Microscopic section, distribution, age, prognosis.

Spindle-celled sarcoma: — Microscopic section, distribution, prognosis.

Alveolar sarcoma:—Microscopic section, origin, distribution.

Melanosarcoma:—Microscopic section, pigment, origin, distribution, prognosis.

General Characters of Sarcoma:—Vascular supply, metastasis, capsule, infiltration, lymphatic supply, secondary changes, distribution.

CARCINOMA:—Origin, microscopic structure, varieties.

Glandular cancer:—Distribution, gross and microscopic appearances, lymph- and blood-vessels, secondary changes, differentiate from adenoma.

Squamous-celled cancer: — Distribution, gross and microscopic appearances, characteristic margin, infiltration, secondary changes.

FIRST MONTH.—TUMORS.

Fourth Weekly Meeting, September — 1907.

PAPILLOMA:—Origin, structure, varieties.

Warts:—Microscopic section, distribution, number, pigment, secondary changes.

Villous papilloma:—Structure, gross and microscopic, distribution.

Psamomma: — Structure, chemistry, location, prognosis.

ADENOMA:—Structure, varieties, capsule, fluid, recurrence, infiltration, secondary changes.

DERMOIDS:—Structure, distribution.

Sequestration dermoids:—Location, mode of origin, contents, prognosis.

Tubulo-dermoids:—Distribution, contents, size.

Lingual, Branchial and Rectal:—Location of each.

Ovarian dermoids:—Origin, structure, contents, size, age.

Moles:—Distribution, structure, secondary changes.

TERATOMA:—Differentiate from dermoids.

CYSTS:—Mode of origin, structure, contents.

Retention cysts, tubulo-cysts, hydroceles and gland cysts.

CANCER OF UTERUS.—Cancer of Cervix.—

Pathology:—Squamous-celled. Origin, gross and microscopic changes in cervix, excrescences, degenerative changes, ulceration, excavation, extension to vagina.

Adenocarcinoma. Origin, changes in cervix. rate of growth, secondary changes.

Extension to surrounding structures. Metastasis.

Diagnosis:—History, age, childbearing. Hemorrhage, leukorrhoeal discharge, pain. General symptoms, cachexia, etc. Physical examination, touch, sight, and smell. Differences between squamous-celled and adenocarcinoma in early stages. Microscopic examination. Method of getting specimens, staining and mounting. Differentiate normal and malignant specimens.

Treatment, Prophylactic, repair of lacerated cervix. Radical, hysterectomy, probability of recurrence. Palliative, curetment and cauterization, medicinal treatment. Use of X-Rays. Cancer of body of uterus.

Pathology:—Adenocarcinoma, origin, extent of growth, degeneration, ulceration, extension through wall, rate of growth. Extension to adjacent structures. Metastasis.

Diagnosis:—Age, childbearing. General symptoms, hemorrhage, discharge, pain. Physical signs by touch, sight and smell. Microscopic examination, only means for early diagnosis.

Treatment:—Radical, hysterectomy, technic. Palliative.

FIRST MONTH.—TUMORS.

First Weekly Meeting, September—1907.

Anatomy and Histology, (Exhibit Microscopic Sections).

1. Epithelial Tissue
2. Connective Tissue
3. Muscular and Nervous Tissue

Second Weekly Meeting, September—1907.

Differential Diagnosis of Malignant and Benign Tumors

Location Varieties and Microscopic Appearance,

1. Fibroma, Lipoma,
2. Chondroma, Osteoma, Myoma,
3. Myxoma, Neuroma, Glioma,

Third Weekly Meeting, September—1907.

4. Angioma, Lymphangioma,
5. Sarcoma,
6. Carcinoma,

Fourth Weekly Meeting, September—1907.

7. Papilloma, Adenoma.
8. Dermoids, Cysts

Cancer of Uterus.

Monthly Meeting, September—1907.

Etiology of Carcinoma

Probability of Recurrence in Sarcoma and Carcinoma

Benign Tumors of Breast, Diagnosis and Treatment.

ORIGINAL ARTICLES.

AUTHORS AND REFERENCES.

PRIMARY MALIGNANT DISEASES OF THE SPLEEN.*

BY G. A. HENDON, LOUISVILLE.

The following, recorded for the purpose of illustration, is intended as a contribution to the literature upon malignant disease of the spleen.

Mrs. F. M., age 45; married; four children. Consulted me one year ago, complaining of obstinate constipation. Upon examination of the abdomen, I found a hard but movable mass situated in the left hypochondrium. I advised operation which was declined. She returned to me after twelve months trial of various patents. Size of tumor was materially increased, but her chief complaint now, was weariness and weakness felt upon the slightest exertion. She was now ready for operation.

Incision was made over the prominence of the tumor, two inches to the left of the median line, through which a large spleen was recognized.

Pedicle was ligated with No. 4 twisted silk. Four ligatures were necessary to compress all its structures. Pedicle was covered with peritoneum by using continued No. 0 cat-gut sutures. Abdomen was closed without drainage, union by first intention.

The patient went home in three weeks. The tumor weighed in the green state, 4 1-2 pounds, and microscopic examination proved it to be round-cell sarcoma, report is herewith appended. Up to the present time, August 31st, four months approximately, there have been no untoward symptoms developed. The patient has attended to her duties upon the farm without discomfort.

Malignant disease of the spleen is one of the rarest affections we have to deal with. This organ has manifested very remarkable resistance to cancerous invasion, even when abdominal viscera in its immediate neighborhood have been affected.

In the article written by Jepson & Albert, in the *Annals of Surgery*, Vol. XL, p. 80, we find this significant statement: "It has long been recognized as a fact that the spleen is possessed of a relative immunity to secondary involvement by new growth, while the existence of malignant neoplasms having their origin primarily in this organ has been so infrequently observed, that some doubt has been expressed as to their existence."

Jepson & Albert, *Annals of Surgery*, vol. XL, p. 80.

Friedrich, *Virchow's Archives* 1865. XXXIII. P. 48.

Woodruff, *Cincinnati Jour. Medicine*, 1867, ii 471.

Bridges, *Chic. M. J.* 1868. XXV. 729.

de Ritis, *Movimento*. 1879. 2.s. 511:580.

H. Kendall, *Med. Rec. N.Y.* 1881 xx. 123.

Weichselbaum, *Virchow's Archives*. 1881. lxxxv. p. 692.

Gaucher, *These de Paris*, 1882.

Verhandl. d. deutsch. Gesellsch. f. chir. Berl., 1884, xiii 30.

Herszel-Orvosi *Hetilap*. 1885. No. 39. Ref. from *Hildebrand's Jahresh.*

Fritsch, *Zeit. f. Heilk.* 1888. p 399.

Asch, *Archivesff: Gynakol.* 1888 p 130.

Schonstadt, No. *Zur Casuistik des primaren Milzarkoms* 80 *Wurzburg* 1891.

Wagner, *Verh. des. Duet. Gesellsch. f. Chir.* 1841. vol. xxiii p 155.

Masi (M) *Linfo-sarcoma primario della milza. Gl' Incurabili*. 1893 viii. 3-12.

Acker, G.H., *Arch. Pediat. N.Y.* 1895. xii 592-4.

Cohen & Reisman, *Tr. Path. Soc. Phila.* (1893-5) 1896 xvii 250-3.

Picou & Raymond, *Arch. de Med. Exper. et d'anat. path.* Paris 1896, viii. 168-85.

Grobe, *Virchow's Arch. Berl.* 1897. CL. 324.

Whiting, E., *Tr. Chic. Path. Soc.* 1899-1901. iv. 343-7.

Casott, *Verhandl. d. phys. med. Gesellsch. zu Wurzb* 1900- l n.f. Vol. xxxiv. 86-91.

Weber, J., No. *Ein Fall von primaren Milzsarkom.* 80 *Erlangem* 1901.

Simon, *Beit. z. klin. Chir.* xxxv. 1902. p. 313.

Piazza-Martini, *Lavoridd Cong. di med. int.* 1902. Roma 1903. xxii 521-3.

Pasinetti, *Riv. Veneta. De. sc. med. Venezia.* 1902 xxxvii 113-128.

Bunting, C.H., *Primary Sarcoma of Spleen with Metastases.* *Univ. Penn. M. Bull. Phila.* 1903. p. 191.

Le Fort., *Bull. et mem. Soc. de Chir. de Par.* 1903. n.s.xxix 1176.

Jepson & Albert, *Annals of Surgery*. xl. 1904. 80-97.

Favre & Morellet, *Gaz. hebdom. d. sc. med. de. Bordeaux* 1904. xxv. 404-6.

Jordan, *Annals Surgery* xxxviii, p. 916.

Jousset (Marc), *L'Art. Med. Paris.* 1905. C, 170.

Flotham, Collins, Krylow, & Kocher. *Annals of Surgery.* GL p. 80.

Warren & Harris, *Annals of Surgery* xxxviii p. 671.

Jordan, *Annals of Surgery* xxxviii p. 916.

* Read before the Kentucky State Medical Association October 11, 1906.

- C. A. Powers of Denver. *Annals of Surgery*. xliii p. 48.
 Willy Meyer, *Annals of Surgery* xliii.
 Ab., J.A.M.A., Vol. XLVI p. 760.
 Graf., J.A.M.A. Vol. XLVI p. 238. *
 Davis, *Jour. Amer. Med. Association*, Vol. XLV. p. 684.
 Auvray, *Jour. Amer. Med. Association*, Vol. XLV. p. 1232.
 Garolamus, *Jour. Amer. Med. Association*. Vol. XLV. p. 836.
 Webster, J.A.M.A. XLI. p. 887.
 Jordan, J.A.M.A XLI. p. 217.
 Bayer J.A.M.A. II. p. 687.
 Laspeyres, J.A.M.A. XLVIII p. 159.
 M.H.Richardson, *Annals Surgery* XLII p. 666.
 Levison, *Annals Surgery* xxxviii p. 671.
 J.W.Hunter, *American Journal Medical Science* Vol. 129, p. 609.
 Jordon, *Amer. Jour. Med. Science* Vol. 128, p. 738.

ARTERIOSCLEROSIS AND THE IMPORTANCE OF AN EARLY DIAGNOSIS AND TREATMENT.*

BY J. T. GREEN, LEITCHFIELD.

My apology for presenting this subject is due to the apparent lack of interest in the importance of it.

Arteriosclerosis may be made to comprehend the conditions known as Arterio-capillary-fibrosis, chronic endarteritis, and atheroma, which are expressions, practically, of the same pathological condition. Differing, perhaps, only in degree or form of degeneration.

Arteriosclerosis is an organic disease, and deserves more recognition at the hands of the physician than it has hitherto received. Health and longevity depends upon perfect functioning arteries. And the importance of this gave rise, no doubt, to the trite saying that "A man is as old as his arteries."

The indirect causes of arteriosclerosis, no doubt are legion; but the principal cause is innutrition. And to mention all the causes leading up to or causing malnutrition in the arterial walls would carry us beyond the limits of propriety. I shall mention some of the causes, however, that are preventive and curative, and in this anticipate arterosclerosis, and by proper and timely treatment preclude the initiation of such a state of affairs that must cast reflection upon the healing art, especially preventive medicine, from which we get more positive and tangible results than curative medicine.

When arteriosclerosis is well developed,

we are face to face with an intractable foe. And to escape the dilemma, we compromise by calling the condition the physiology of age, and apply the holy injunction "Thy will be done not mine."

I know that the wear and tear of life and age is cited as a prime cause of arteriosclerosis. This may be true in part, but too much importance attached to this as a cause is misleading. Heredity is also said to be a predisposing cause, but this is only a prophecy of what may be, and not a destiny which must be. There are always modifying forces at work in the life cycle of a man; and these forces properly recognized and guided, will, I believe, disinherit this parental heritage, and render it practically nil upon life. And in those so predisposed bring out the true evolution rather than degeneration. There are certain diatheses such as the arthritic and tuberculous, especially, that induce senescence in the young. There is a form of arteriosclerosis depending upon senility, and there is a form of senility depending upon arteriosclerosis; and it is to the latter to which our remarks are intended. There are about three forms of arterial degeneration, classed as the albuminous, fatty and calcareous. The arterial system suffers from one or a combination of these forms of degeneration, depending largely upon the special cause and progress of the degeneration.

Among the causes, that concern us in producing arteriosclerosis and are amendable in a satisfactory manner by treatment, are changes in the composition of the blood, such as toxins from bacterial infections, syphilis, rheumatism, metallic poisons, alcohol, and the disturbed metabolism of gout, Bright's disease and other auto-toxins and excessive and prolonged arterial tension. And it is in this last cause, prolonged arterial tension, where in my judgment we are able to anticipate arteriosclerosis by restoring the normal equilibrium of the circulation by relaxing the arterioles and the vasa vasorum.

It is in this condition of contracted arterioles and especially the vasa vasorum that degeneration begins because nutrition is to a great extent cut off from these vessels.

It is in the infectious diseases, for which we are called upon daily to treat, that we should keep a lookout for increased arterial tension, and when it is observed and not traceable to an evanescent cause, gives rise at least, to the suspicion that all is not harmonious and demands your careful investigation and treatment.

Some of the infectious causes are permanent from the start such as syphilis; they

* Read before the Muldraugh Hill Medical Society.

place the organism under permanent conditions of defective nutrition.

At other times, the infection is of only temporary duration, and it is itself conquered in the struggle to which it has challenged the organism. But the latter severely wounded in the combat, will often retain an indelible mark of the assaults which it has received, and from this moment the nutritive changes will remain modified, either diminished or perverted. I believe on account of our restricted knowledge of the pathogenesis of infections, we permit their pathological processes to escape our notice, because of their insidious beginning. We may be left to conjecture the mode of action of many of the poisons, yet there are clinical facts and conditions by which we can formulate a positive opinion concerning the permanent deterioration inflicted upon the organism. Arteriosclerosis may be general or local and is evidence by disturbance of the function of the organ involved, chronic nephritis, angina pectoris and many of the orifice and valve lesions of the heart are evidences of arteriosclerosis. The sclerosis of the systemic arteries can be made out by inspection, palpation and auscultation. The arteries become hard and brittle, especially if the degeneration is of the calcareous form, the degeneration of the elastic tissue with the proliferation of the connective tissue is the most common finding in the young and middle age and is generally uniform.

This thickening of the arterial walls was thought by Bright to be a muscular hypertrophy. But it has since been learned that instead of muscular hypertrophy, (except perhaps temporarily) the process is one of muscular and elastic tissue degeneration and the formation of fibrous tissue out of place. It is claimed that the thickening of the arterial walls and the arterioles may begin in the internal coat of the vessel, in which case there is gradual obstruction of the vessel by the thickening of the intima and the fibrous process extends from within out. Or it may begin in the adventitia, the outer coat of the vessel, and the fibrous process invade the media or muscular coat and cause its degeneration or the fibrous process may arise external to the arterioles altogether. In the first the affection of the intima the exciting cause is, no doubt, a poison circulating in the blood. In the latter where the fibrosis extends from without in the lymphatics of the adventitia and fibrous tissue are the channels through which the process of fibrosis is initiated. With some forms of kidney disease the relation to arteriosclerosis is close, especially in interstitial nephritis in

which case the proliferation of the fibrous tissue begins in the connective and fibrous tissue of the kidney and progressively involves the arterioles and the arterial walls, and apparently by a sort of vicious nutrition through the lymphatic channels of the vessels. Therefore we look upon arteriosclerosis as due to a soluble and diffusible poison in the circulating fluids of the body, and that form known as atheroma due to a precipitation of the inorganic materials from the slowed and impeded circulation in the vasa vasorum. I may also add that or repeat that continuous hyper-tension is not to be despised as a cause of arteriosclerosis; and there may be some confusion in differentiating between high tension, and arteriosclerosis, and as the radial pulse is the one oftenest examined, we may with this casual and routine way of examination observe that the tension in the vessel is increased and altogether overlook the fact that there is already a sclerosis of the arterioles of the lungs as evidenced by asthma often; and in the liver as in hepatic sclerosis; and in the kidneys, as in a nephritic that has never given rise to any symptoms and more especially might it be overlooked during scarlet fever and pregnancy where there is invariably a plus blood pressure which is a very prominent factor in the initiation of arterial degeneration, and the subsequent development of sclerosis in the arterioles and more especially of the kidneys, in the female, arteriosclerosis often shows itself by the evidences of premature senility. Gingivitis, a pathological affection of the gums, causing decay and loss of teeth, is an expression of a continuous high arterial tension and sclerosis.

Premature gray hair quite often bespeaks this arterial change. Insurance companies recognize this fact and often it is a cause for the rejection of the applicant.

All of these or many of them at least, are due primarily to prolonged arterial tension and moderate degree of degeneration. It is these conditions that confront us daily and the timely recognition and treatment will forestall the development of aneurism which I believe is as much in the line of prevention as puerperal sepsis.

I believe the proper and timely control of the circulation often means the control of life.

The diagnosis of arteriosclerosis with increased tension is not always easy.

The mechanical means such as the various sphygmographs now in use for this purpose, are an aid, but not absolutely essential for a diagnosis, in fact I think their use as such is very limited. The instrument most to be re-

relied upon is an educated finger. This is always at hand, in the office or in the country. And with an educated finger we can certainly determine low tension, high tension, large or small volume, the approximate degree of compressibility, and whether the pulse remains full between beats, that is, long under the finger. Also the density and distinctness of the arterial walls. These physical evidences together with the disturbances of the peculiar physiological function of the organ involved form the basis for a diagnosis; that is, if after pressure on the artery it can still be felt beyond the point of compression, its walls are sclerosed; whereas, if after such compression, the artery is obliterated beyond the point of compression, the hardness and firmness of the pulse previously observed are due to vascular tension and not to thickened walls. Also hypertension may be said to be present if the vessel remains full between the beats.

The two conditions should be distinguished, as there may be arterial hypertension without sclerosis. And there may be arteriosclerosis without increased tension; but this latter is the exception and not the rule.

In fact arteriosclerosis is almost synonymous with increased tension, unless there co-exists cardio-muscular degeneration. The normal pulse varies in volume and tension, as the body assumes different positions; also the walls of the normal vessel can not be distinguished, or contrasted with its surrounding tissue. The reverse is invariably true of arteriosclerosis and is diagnostic of that condition. And especially so if accompanied with an accentuated second sound of the heart.

The treatment in these cases depends upon the condition present, and even with the conditions known, it often taxes the resources of the physician to meet them. But I believe with the advancing knowledge of the physiological effects of drugs, their indications and limitations together with the progress being made by the medical profession in physical therapeutics gives us weapons of precision in combating these and many other conditions.

The first efforts in treatment should be directed to the restoration of the normal arterial caliber.

The normal tension of the artery is primarily disturbed by indigestion, constipation, diarrhoea, irregularity in the function of the kidneys, disturbance in the respiratory organs, chilling of the surface of the body, and especially by the morbid products of metabolism retained in the circulating fluids of the body, also mental disquietude and the caliber of the vessel is permanently lessened by the organic changes which later take place

in the walls of the vessels by a prolonged continuation of the temporary causes.

These temporary or initiatory causes can be corrected by treatment. First by the proper dietary, hydrotherapy and vibratory massage, and clearing out the alimentary canal with alkaline laxatives. This course will often clear up a good deal of obscurity that exists. Too often the medication in these cases, while intended for good, actually do harm. Digitalis for example, which is so often given to the patient upon his complaint of disturbed heart action which in most instances is due to an already increased arterial pressure.

These and synergistic remedies are too often given in these conditions. I believe if the pendulum of medication must swing too far in these cases, that the vaso-motor tonics should be substituted by the vaso dilators, and the iodides and nitrates of potassium and sodium given as a routine practice. Given in physiological doses it will relieve arterial spasm assist in unloading the capillaries of the morbid products of metabolism, and rendering neutral the acid accumulations in the system.

OPERATION FOR ARTIFICIAL PUPIL.*

By A. H. EDWARDS, HOPKINSVILLE.

Of all operations on the eye, none is of more importance to the general practitioner than that of artificial pupil. And yet it is one that the physician knows scarcely nothing of, nor does he know of the good results obtained from so simple an operation.

A while ago, I was telling a physician of such an operation that I had done on a young man, who had been blind for years and who in a few weeks after the operation was able to do all kinds of farm work. The doctor had never before heard of such an operation. So I have written this paper to give you some light on the subject and will explain the operation in as simple manner as possible.

For example, we will let a room with no opening except one round window represent the eye-ball. We will let the glass in the window represent the cornea and a round, wide rubber curtain, either black, brown, blue or gray with its outer edge fastened to the window sash and drawn almost together in the center, so as to keep the glaring light out of the room, represent the iris, and the small circular hole in the center of the curtain, the pupil.

We will place a man on the inside of this room to represent the retina, except that we

* Read before the Christian County Medical Society July 15, 1907.

will not stand him on his head, as an object is made on the retina bottom-side up. Now we have the room complete and the man on the inside can look out of his small window and see this wonderful world, even to the minute things placed in it for his pleasure. But let some one paint the center of this little window pane and his vision would be cut off, just as it would be in case of an opacity or scar left from a deep ulcer of the cornea, provided the scar was in his field of vision, or in other words, over his pupil.

But should not all of the window pane be painted, leaving, say the lower fourth of the pane clear, the man's vision on the inside would be cut off, just the same as if the whole pane was painted, on account of the curtain, or iris, extending over the clear spot of the pane, or cornea.

Of course, he could take his hand and stretch the curtain over the clear spot, just as atropia would do the iris by its dilatation and permit the man to see out, but as soon as the medicine lost its effect the iris would again contract from over the clear spot and the patient would be blind again.

So the practical thing for the man on the inside of the room to do, would be to cut another hole in the rubber curtain just over the clear place in the pane of glass, so there would be nothing to obstruct his view. An artificial pupil is just that and nothing more—the cutting another hole in the iris so the light can pass through into the eyeball.

First we anesthetize the eye thoroughly by making several instillations of a 4% cocaine solution at short intervals before the operation, say five minutes. We then make an incision into the ball about 2 lines from the corneo-scleral margin and then we pass a pair of iris forceps through the opening and grasp the margin of the iris and draw it out and clip off a small portion of it, and then like a rubber curtain it will contract back to its proper place and the new hole is an artificial pupil. It will not be round and beautiful as the old one, nevertheless it will be a pupil through which the patient can see.

Of course, there are some complications that may arise. Perchance the patient may have had iritis, caused from the ulceration of the cornea, and the iris might have adhered to the capsule of the lens, and in that case we would have to break loose the adhesions with a Streatfield ivory hook before withdrawing the iris.

Care should be used in getting all of the iris out of the mouth of the incision, so adhesion of the cornea will take place at once.

One important thing to be remembered is to not make an artificial pupil of one eye if

the sight of the other one is good, for fear of not obtaining perfect binocular vision.

The dressing is simple. The lids should be closed and covered with a pad of gauze, held in place by adhesive straps. Rest in bed in a darkened room for a few days is always advisable.

FORCE DELIVERY.*

By DAVID O. HANCOCK, HENDERSON.

That "meddlesome midwifery is bad," is proven by modern knowledge of obstetrics, yet we stand appalled at the misery that hath been wrought with that one tale. Child-birth has ever been clothed with sanctity, surrounded with a halo the super-natural, which has caused men to leave to the strength of the mother the performance of this act, to lessen human suffering is our mission, to render needed assistance is not meddling. A failure to do so if we have opportunity is a crime. For centuries our practice has been to assist nature when the life of the mother or child was in peril. This is right, the truth, but not the whole truth. To the pleading agonizing cries of these women we have turned a deaf ear or answered, "It is a just punishment for the sin of the garden." Or even worse than this we have stultified ourselves by subterfuge and winked at teas, poultices or manipulations in which there was no efficiency. This is not honest; it is not right; the time is past, if indeed such a time ever existed, when a great body of scientific men must descend to petty subterfuge to retain patients and secure dollars. Professional prevarication like the manacles and chains of the mad-house, is a relic of unscientific barbarism, and tactful truth, the therapeutic agent, the prophylactic agent for regeneration of diseased humanity, for the saving of countless lives, and the avoidance of indescribable misery.

In more recent times we are giving heed to the wails of the parturient woman. But we are yet not far enough advanced to preclude an admonition on this subject. Let us add to this "life-saving crew" a following whose mission shall be,—acting within the lines of science and safety,—to alleviate human suffering, shorten the duration of labor and preserve the strength and energies of the new mother.

The powers by which a child is born are strength and force. Strength is supplied by the mother, force is added energy. This inward capability of the mother may exhibit added power by being stimulated artificially or it may be supplemented by extraneous

* Read before the Henderson County Medical Society.

power. Our subject relates to added power. Assuredly it does not mean power exerted against the will, or consent of the patient, or the force of an army marching to battle. On the contrary it is best that all be quiet, and that only a limited and select few be present. It is not the power of stress, vehemence, violence, constraint, conversion, or compulsion. It is the patient, scientific, safe, skilled and sane, application of proper means to the benefit and need of agonizing women.

This is an old subject, old as the history of man. It is important, rendered more so by the increasing millions on earth. It is opportune that we, together, review this subject. Isolation of thought in our profession is dangerous. "We dare not make ourselves of the number, or compare ourselves with some who commend themselves; but they measuring themselves by themselves and comparing themselves among themselves are not wise." I ask, therefore, your earnest, but charitable criticism on what I may have to say on some divisions of this subject.

It is sometimes necessary to interrupt gestation and make force delivery. A woman may mature a normal child, but having a contracted pelvis be unable to bear it. It is safer to interfere after the seventh month than to trust to forceps or abdominal section at full term. It is astonishing that at this day and time the accoucheur is often not consulted until labor is fully established. When a woman becomes pregnant she should immediately engage a physician who should at once be placed in possession of all necessary information and thereafter be consulted at least once each month during gestation. By this practice many lives would be saved, both of mothers and children. Last year I had a sad experience along this line. Full term, contracted pelvis, scrofulous from infancy, albuminuria for several years. Habitual death of the foetus may occur from inanition dependent upon maternal anemia, degenerative changes or faulty development of the placenta or to alterations of the cord, in such cases premature or force delivery may be indicated. Again, diseases which imperil the life of the mother as,—chronic diseases of the heart and lungs, over-distension, hydramnios, tumors, uncontrollable vomiting, hemorrhage from placenta previa, chorea, convulsions and nephritis. These conditions justify premature delivery. We omit the technique of the operation, in much of our difficult work the operation is eclipsed in importance by the services of the attendant or consultant who counsel what is to be done and when.

Force may be added to the strength of the woman by certain positions or manipulations

which tend to fix the muscles of the chest and cause contraction of the diaphragm or muscles of the abdomen; as standing by a table or chair with part of the body weight on the arms; pulling on tractors or the hands of attendants. Catheterization may produce violent uterine contraction, so also an enema.

Certain drugs add force to the strength of the mother either by stimulating the nerve centers which control uterine contraction; or by, for the time, sedating these centers and allowing nature to rest and recuperate. Prominent as stimulants are quinine and ergot, as sedatives chloral and chloroform. These agents should be used with circumspection. Chloroform admits of extended use. It relieves pain, lengthens the interval, and strengthens the contraction. It is safer in obstetrical practice than elsewhere.

Forceps is chief in force deliveries. Where the strength of the mother and the judicious use of the ordinary forces do not avail we should apply forceps and deliver. There are occasions, too, where the interest of the child and mother demand the immediate use of this aid. There are anomalies of the expulsive power, uterine or abdominal inertia may be actual or relative. I recently saw a case of inertia with a member of this society. A large, fat, woman, two years ago she was delivered of her first child in a neighboring town. Forceps was used, child dead. This time, she had been in labor all night. Pains were nagging and inefficient and well exhausted the patient. I applied forceps and we delivered a living child in a short time. I present you here the photographs of two girls, sisters, ages respectively 2 and 4 years. These girls I delivered with forceps because of inertia. In each case I waited long and patiently because there was nothing in the way. Dilatation was full and the head well down in the pelvis. The child each time was in good condition. So I waited, waited, waited,—for about 24 hours from the beginning of labor. The forceps was easily applied and delivery completed in a short time. There were no untoward after conditions either of mother or children. For shame that I let this good woman suffer so long. On the 18th inst., I delivered a primipara with forceps. I saw her in labor first at 9:30 o'clock P. M., of 17th. Cervix dilated to size of silver dollar. Pains frequent and weak. At 3 o'clock following the head was well down in the pelvis. So far, good, at 5:30 no progress. I gave a teaspoonful of ergot. At 6:30 A. M. no progress. I ruptured the membranes. At 7:15 A. M. I applied forceps and delivered a living child. No

harm came from the use of instruments. She is doing nicely and will soon be up.

Contrast the saving of time and torture in this case and in that of the corpulent woman with that of the mother of the two sisters and with the first delivery of the fat woman. I have not seen bad results from the use of forceps in this condition. The perineum is safer, the child protected, probable hemorrhage lessened, anxiety allayed, labor completed, and suffering ended by their use. On the contrary continued pressure may cause an abscess or sloughing of tissues, and a lowered vitality and resistance of the parts thereby increasing the liability to infection, by exhaustion hemorrhage is more liable to occur. It is not argument sufficient to say that these cases are finally delivered without instruments. I submit it that more harm is done by failure to use forceps, than by using them, and I wish this statement to apply to the entire field of obstetrical practice. Our patients are entitled to the best that is known to-day.

Relative inertia occurs where there are anomalies of resistance. Rigidity and stenosis of the lower birth-track and contracted pelvis make up the category. The expulsive power is relatively too weak if the resistance is greater than normal. The same condition pertains, with a normal pelvis where there is fetal dystocia as occipito posterior, or deep transverse cranial or face presentations or arrest of after coming head, or where there is overgrowth of the child or monstrosity. In all of these conditions the use of the forceps may be implicated, and there is less margin as to delays than in simple inertia. Miscellaneous and mechanical complications of labor may necessitate immediate delivery. Placenta previa, detached placenta, rupture of the uterus, eclampsia, severe acute or chronic conditions are instances. Here the forceps may or may not be used.

It would be unprofitable to attempt to enumerate all the conditions which render forceps advisable. Hospital reports give instrumental deliveries in 1 to 15 or 1 to 25 cases. The mortality is remarkably low both to child and mother. Private practice will hardly give such a record. May it not be true that we miss our greatest opportunity to do good, and to establish this useful and humane instrument in the confidence of our people? Away with the old granny saying that "when a man enters one or both must die."

Before forceps is applied the cervix should be well dilated. The membranes should be ruptured. The head must have engaged. The possibility of successful delivery ascertained. Also the fact that the child is alive. With

these conditions present and no contra-indications, after two or three hours waiting with no change in the position of the presenting head, we should apply forceps and deliver, granting that delivery might occur without instruments after 6, 8, or 10 hours waiting I still hold that we should use forceps:

Very few of our people are educated to that view of instruments. Indeed many physicians who do forceps operations are not willing to accept this view. For reasons already given I hope we shall soon approximate it. Our colleges are sending out men better equipped by actual experience for this work. The venerable old men who boasted that they seldom or never needed to use forceps have been forgiven and gone to their reward. If we meet the exigencies of the occasion our mothers will bless us. I have no special method to foist upon you; no special skill to offer; no "send for me" suggestion to make. I pass the history of this operation, its classification and especially its intricate use. So also the preparation for its performance and the technique. And what blade to introduce first, and by what finger guided, these and like things are familiar to most of us, and are well described in our literature on the subject.

One thing I have desired to emphasize, in actual and relative inertia let us not wait until the woman is exhausted and the soft parts injured or until the child is dead before we come to the rescue, let us recognize an emergency and act promptly; by so doing we will take away the opprobrium of the operation. We can and we should make labor more tolerable, for every experience is to the woman like the boy's extracted tooth: "just before I died the thing came out."

Version was more relied upon formerly than now, yet it has its place in force deliveries. In emergency cases where there is some margin of time or where, by bringing down a foot or two the danger is lessened as in hemorrhage by plugging the outlet, or in flattened pelvis where the aftercoming head passes more readily than in head-first delivery. Or where a prolapsed cord is the occasion of danger; or in face presentations or other practically impossible positions; in these conditions it is often preferable to do version. Podalic version is usually thought of as version because it is now more frequently and more easily performed. I recently reported to this society a case of spontaneous version. When I first saw the case the cervix was dilated, and a shoulder presenting, soon a hand and arm came down. Pains were regular and strong, the child small. I made upward pressure at the shoulder and held firm on the buttock.* A pain, a slip, a slide occurred and

the breech was presenting. So easily was this accomplished that I claim very little part in it. I had prepared the parents for trouble. But delivery was speedily completed and a living child born.

Another case of some interest was with a member of this society last June. The woman had convulsions, which were controlled with veratrum. Four or five days afterwards labor came on, pains were inefficient. We dilated the cervix and stimulated contractions to our utmost, but finally brought down a foot and delivered a dead child. I used forceps on the after-coming head in the interest of the mother who was very much exhausted. The child had evidently been dead for several days. The after history of the case was normal. The natural delivery of a child is head first. Cephalic version may be used in breech presentations; but usually it is not necessary as breech delivery is as safe as vertex plus version. Hirst speaks of postural version. By position of the mother he tries to change a brow to a vertex presentation. I remember a case where the woman had had pains for several hours, no dilatation. She took the knee-chest position and by external manipulation I converted what seemed to be a transverse position of the child into a longitudinal position with the head on the cervix. Pains ceased, and after three weeks labor came on and I delivered her of a well-developed child.

From New York Hospital reports version is performed in 2% of all deliveries. The order of frequency was given as follows: Deformed pelvis, shoulder presentation, placenta previa, prolapsed cord, occipito-posterior, inertia, hydro-cephalus and albuminuria. Version has its place in force deliveries and although done less frequently now, it will always remain one of our reliable methods.

We do not care to discuss craniotomy further than to say that as to the mother it is a safe operation. When performed we should be sure the child is dead before beginning. This is often difficult to know. So also is it difficult to exclude surgery in these cases for the removal of the child alive. These limitations leave a small place for this operation.

When it is ascertained that the child can not be delivered, abdominal section should be employed. We hear very little to-day of the fillet, sling, blunt-hook or crochet. The horrid mutilations have passed into history. The newer mutilations of the mother,—symphysiotomy, pelviotomy, etc., are short-lived and already are regarded as, "things that have been done."

"Meddlesome midwifery is bad," surgical

interference is not meddling. The bungler should hesitate; he should desist. There is no excuse for ignorance in this enlightened age. We are inclined "rather to bear the ills we have than fly to others we know not of." Hasten the day when this can not apply to our subject. When parents shall gladly accept our services, when surgical aid is regarded a God-send to suffering motherhood.

ANATOMY AND SURGERY OF COLLES FRACTURE.*

BY R. C. FALCONER, LEXINGTON.

About ten per cent of all fractures are of this variety and according to Stimson, this fracture occurs next in frequency to that of the ribs.

I realize this is an old subject and have nothing new to add to it, the purpose of this paper being only to invite your attention to and emphasize some of the already well known anatomical and surgical points upon which depend the treatment, prognosis and result of this common fracture.

Colles of Dublin (1814) is accredited with having discovered this fracture, which prior to that time was regarded as a backward dislocation of the wrist; he, however, seems to have understood the subject only in a general way. Later on Sir Astley Cooper (1823) described a fracture of the lower end of the radius, but he likewise failed to understand its real nature until he made the subject a matter of dissection. The frequency of this fracture and its results influenced the French surgeons, notably Pouteau, to investigate it. Dupuytren, too, made the subject a special study, dissected and demonstrated the real nature of the fracture by a post mortem examination. This was as early as 1820 and in 1830 his views were generally accepted. Due credit must be given also to Prof. E. M. Moore, of Rochester, N. Y., for clearing up some of the hazy points as to the character of Colles fracture. As we all know, the line of fracture occurs at the lower end of the radius, one-half to one and a half inches above the carpal articulation. This injury is essentially osseous but other structures are often involved which are important enough to demand consideration and treatment, as I shall attempt to show. For instance, in Colles fracture characterized by widening of the wrist and dislocation of the ulna (styloid process) the internal lateral ligament and triangular fibro-cartilage are ruptured or

* Read before the Second Annual Meeting of the Kentucky State Association of R. R. Surgeons, Frankfort, May, 1907.

avulsed from the bones. I might mention as concomitants of this fracture the biceps, supinator longus, pronator radii teres and pronator quadratus, in as much as they tend to sustain displacements of the fragments, I think these anatomical parts and their relations ought to be borne in mind, since all details count in treatment and therefore results. It is easily understood that when the radius is broken and the fragments displaced the ligaments and other connections must bear the strain or give way, either is in itself an injury. The internal lateral ligament arises from the styloid process and is inserted into the carpus. The triangular fibro-cartilage has its origin in the side of the radius and covers its (radius) articular surface and is inserted into the base of the styloid process where this ligament is narrowest and weakest. Luxation of the ulna associated with Colles fracture is the result of rupture or giving way of this connection and occurs according to Seudder in 50 to 65% of all cases. In the typical silver fork variety of this fracture the lower fragment is drawn upward and backward by the supinator longus, flexors and extensors of the thumb. The upper fragment is drawn forward by the pronator quadratus. When pronounced ulnar displacement exists that bone may be moved up and down also laterally. I have made this observation in a number of cases and is caused by rupture of ligaments.

Treatment—The two cardinal principles in the treatment of Colles fracture are complete reduction and retention of fragments in apposition. General anesthesia is necessary in cases characterized by displacement of fragments and resulting deformity. A simple Colles fracture without displacement is usually easy of reduction and needs only anterior and posterior splints well padded and adjusted, care being taken to have the forearm semi-prone, hand adducted, fingers free and movable. I do not think it makes any difference what kind of material we use for splints provided reduction is complete and the splints are well adjusted to the fragments. If reduction is incomplete or faulty no kind of splint or apparatus will correct it. Personally, I am partial to plaster of Paris splints and have found this material very useful. It can be applied by the roller method and split longitudinally before it dries or longitudinal splints can be moulded to the forearm. Splints made in this manner, well padded and moulded are easily adjusted and removed for inspection and massage. They ought to extend from a little below the elbow to a little above the metacarpophalangeal joint. Any kind of splint ought

to be removed about every third day for inspection and readjustment.

I am in the habit of placing a gauze or cloth compress on the dorsal aspect of the radius if the lower fragment is displaced and one under the ulna also to correct displacement of that bone. These I secure by means of an adhesive strip, which serves also to correct spreading or widening at the wrist.

Gentle massage ought to be begun in the second week and is an important part of the treatment, especially in elderly subjects. During the whole treatment the fingers ought to be exercised and massaged. After the third week in these simple cases of Colles fracture lighter splints may be substituted and after the fourth week they may be discarded. Massage is continued and functional movements resumed. Very often in this fracture, particularly in elderly and gouty subjects the tendons and articulations have been more seriously injured than the bones and these cases are especially benefited by massage. The most difficult cases of Colles fracture to reduce are those characterized by impaction and crushing of the spongiosa of the lower fragment, and unless complete reduction is effected and maintained deformity and impaired function will inevitably result. Colles fracture in the young and adolescent is altogether a different proposition from that in the old and infirm and this is an important matter as to prognosis and results. Repair, bony or otherwise does not take place in the latter as in the former nor does always restoration of function. The same rules governing compound fractures of other bones are applicable to Colles fracture. A not infrequent and troublesome complication of this fracture especially in the elderly and lithemic is inflammation of tendon sheaths and of extensor brevis pollicis and adductor pollicis longus with extravasation into tendon sheaths and surrounding fascia. This is due to straining and contusion of the parts. One or two cases which I recall persisted nearly a year. The treatment of the latter condition consists of massage, heat, superheat, and the high frequency electric current. If a gouty diathesis exists it must be combated by regulation of diet, lithia, arsenic, etc. Time, however, will be a factor in the recovery from this condition.

ENURESIS.*

BY H. T. BROWN, IRONTON, O.

When I undertook to write a paper on Enuresis I did not (nor do I now) expect to

* Read before the Mason County Medical Society, Maysville.

be able to tell you anything that you do not already know; but I wrote it hoping that it would get you into such a discussion on the subject that I would be able to learn something new about it myself.

In discussing this subject I will confine my remarks to the pathological condition seen in childhood, commonly called "neurotic enuresis."

Little Willie sprung a leak every night or two,

Wet his brother's nightie and the bed clothes through and through.

They'd get him up full twenty times to try to stop the habit,

But just the same he seemed to be as bad as any rabbit.

Next morning on the line are strung the bed clothes—sad to see,

A place is there as big as this—'cause he couldn't hold his pee.

Gentlemen, when you were little Willie's do you remember how you used to soak things at night, and how, very often, you would get soaked—with a slipper, next morning?

Do you remember how you used to be thirsty and hungry just at bed time after having had a big pillow fight with Sally, and how you'd eat about three slices of bread and butter and drink about a quart of water? And then do you remember what happened that night?

Well, I'll tell you if you don't remember. You know you were only six years old then, so you had to sleep with ma and pa 'cause if you slept in a bed by yourself you might kick the cover off and catch cold. So ma and pa let you sleep right in between them, where they could watch you.

Well, you'd get to bed about eight or half-past and be sound asleep before pa got home from lodge. He'd come in and be so cold that he would go to bed with his underclothes and stiff bosom white shirt on. That was before the nightshirt for men became popular, and if pa had had one he wouldn't have worn it 'cause he belonged to the volunteer fire department and might have to turn out real quick at any minute.

Along about three o'clock the safety valve on your water works gets out of whack, and you know what happened then.

The leak happened to be on the side next to pa, and the next thing you knew you were in the middle of the floor, where pa sent you with one swift kick.

You sat up with a pained expression on your face and saw pa sitting on the edge of the bed wringing the dew out of his shirt-

tail, and you noticed that his shirt bosom seemed to be suffering from yellow atrophy.

Pa said, "You young rascal, if it wasn't so all-fired late I'd take a strap to you right now." But that wasn't the reason he didn't, he didn't like the idea of running around in the cold with those wet clothes on.

Mother, of course, heard the first sound and by this time she was up and it didn't take her long to get dry clothes for you and pa and a dry quilt to go on the bed. She had been into just such mix-ups before and knew just what to do.

Next morning pa was still mad and swore you shouldn't sleep with him any more, so that night you had to sleep with John. Now John was sixteen years old and looked with scorn upon such tricks as you were up to, for he had quit that habit two years ago and was now in the throes of his first love affair.

The time is 3 A. M., again, and John is peacefully dreaming of standing at the altar with his Lucy, when a warm shower comes up and John finds that he hasn't his umbrella with him.

That ends the dream and John wakes up to find that he has been treated to a perfumed bath. Mother comes to the rescue again, but after you had spoiled John's dreams for awhile he kicked, and you were passed on to the other members of the family in their turn. The whole family sighed with relief when spring opened up so that you could sleep on a cot by yourself, without danger of taking cold.

Enuresis commonly affects children, of both sexes, between the age of two years and puberty, and is one of the most puzzling conditions of childhood. The causes are many and hard to find when you want them, and when you are sure that you have found the cause, and have removed it, it pains you to learn that Willie is still up to his old tricks.

Holt gives as causes the following: (a) heredity, (b) habit, (c) anaemia, (d) extreme nervousness (e) malnutrition, (f) cystitis, (g) vesical calculus, (h) local irritation, such as (1) adherent prepuce, (2) balanitis, (3) phimosis, (4) a narrow meatus, and (5) vulvo vaginitis; (i) rectal irritation due to (1) pin worms, (2) anal fissure, etc., (j) highly acid concentrated urine, where an insufficient amount of water is taken, or (k) polyuria, where too much water is taken, will cause it. (l) in a few cases incontinence for a long time has caused the bladder to contract so that it can only hold two or three ounces of urine. (m) The condition is often due to the presence of several of the causes mentioned.

Symptoms—Holt devotes a paragraph under the head of symptoms to statistics concerning the condition. I think that under that head it would have been well to state that the condition is not a disease, but only a symptom of graver trouble in another locality.

Willie's mother knows, without the assistance of a preacher that he wets the bed, and only consults us to find out what makes him do it, and to get him cured.

It is hard to say which is the more difficult, to diagnose the cause or remove it, for sometimes after every possible cause is sought out and the proper treatment instituted, the child continues to annoy his parents and his big brother.

The prognosis must be very reserved in every case. It is more favorable where the trouble has only lasted a few months, or a year or two, than where it has lasted for several years. When some exciting cause can be found the outlook for relief is also more favorable than where no cause can be detected. The trouble usually ends with puberty, but in my own experience I have known two young ladies of 17 and 20 years respectively who reached puberty at the usual age, but who still continue to wet the bed. The treatment is usually very unsatisfactory, for while we may succeed in stopping the trouble in one case, the next nine may be failures.

The first indication, of course, is to find the cause, and remove it if possible, but it has been my experience that there are usually several causes for each case and one is extremely liable to overlook one or more of them. Even after all the causes are removed the condition is likely to continue from force of habit. I have made it a routine to put the child on a tonic treatment, as soon as I feel sure that I have found the cause, and advise "The simple life." Restrict the diet as far as possible to milk, fruits, cereals, vegetables, and light meats, and guard against very sweet or very sour articles of diet. Coffee, tea, or other stimulants should be prohibited. No fluids should be taken after 4 or 5 o'clock in the evening, if possible to avoid it, but I have found that parents will not put a child to bed when it is thirsty without giving it a drink. In case the child is thirsty a small quantity of water or sweet milk can usually be allowed without increasing the trouble.

A child should never be punished for bed wetting as it can do no good and frequently does harm. Moral persuasion will often be very successful and Holt says that he has

known a bribe of five cents for every dry night to work wonders.

Belladonna has been mentioned as a specific for this trouble, but I have never seen much permanent good result from its use. It will usually check the trouble for a short time, if pushed to full effect, but after a time a tolerance is established for it and the trouble is soon as bad as ever.

At the present time I believe that aside from operative measures and the tonics we are without a treatment for this loathsome condition.

I think that it is a subject deserving of our most earnest attention, for too often the results of neglect are felt by the patient throughout his life. After an unsuccessful trial or two we are prone to advise procrastination, with the hope that the trouble will stop of its own accord, but I believe that we should go after it, with all our might, internally, externally, and eternally, until it is cured.

SURGERY OF THE PANCREAS.*

BY JOHN R. WATHEN, LOUISVILLE.

Diseases of the pancreas have, until comparatively recent years, attracted little attention, and only through association with pathological conditions in neighboring structures which are now so universally treated surgically, as the gall bladder and its ducts, have we made special study of this organ.

Before discussing the surgery of the pancreas, I will briefly allude to a few anatomical and pathological facts brought out by late research, and which bear upon its surgical consideration. The pancreas is a retroperitoneal organ, lying deep in the epigastric and left hypochondriac regions, behind the stomach and lesser peritoneal sac, and between the duodenum and spleen. It is reached by raising the omentum and transverse colon, dividing the lower layer of the transverse mesocolon, and elevating the upper layer, which covers the pancreas; or, it may be reached by dividing the gastro-colic or gastro-hepatic ligaments, and then the peritoneum at the back of the lesser peritoneal sac.

The above is the transperitoneal route, but it may also be exposed by the retroperitoneal method, through the muscles of the back, but this latter method is seldom employed.

The pancreas is usually provided with two ducts, the duct of Wirsung, which is the larger, and joins the common bile duct at the diverticulum of Vater, to enter the intestine and the duct of Santorini, which ends in a

* Read before the Kentucky State Medical Association at Owensboro, Oct. 10-12, 1907.

small papilla nearer the stomach than the larger duct. Variations in these ducts are often met with, but they are generally found in accordance with the plan of embryonic growth of the gland, and have an increased importance on account of the association of pancreatic diseases with pathological changes in the biliary passages.

Opie of Baltimore says that "The head of the pancreas consists of two well-defined lobes, corresponding to the two ducts of the gland. The anterior and lower part of the head is tributary to the duct of Santorini, and consists of lobules grouped about the duct and its branches. A second lobe is formed by a smaller mass of parenchyma disposed about the duct of Wirsung as it passes through the head of the gland, and is situated behind the larger lobe." The ducts of this organ are lined with columnar epithelium, which gradually merges into large glandular cells containing zymogen granules, lining the acini. Scattered between the acini are found the bodies of Langerhans, round or oval masses composed of polygonal cells grouped in columns, and supplied with a rich capillary network. These islands are found most numerous in the splenic end, and by an internal secretion are supposed to exert an influence upon carbohydrate metabolism.

The relation of the pancreatic ducts to the biliary passages explains both experimentally and clinically the frequent cause of many pathological conditions found in this organ.

Opie says "the etiology of hemorrhagic inflammation of the pancreas has remained obscure, until a series of cases recently studied has demonstrated a relationship between this lesion and cholelithiasis. Since the common bile duct and the duct of Wirsung unite to form the diverticulum of Vater before they reach the duodenum, changes in the one may be transmitted to the other, thus producing secondary lesions in the liver and pancreas. The association of pancreatic disease with alterations of the bile passages has been noted by a number of writers."

Korte in his monograph upon surgery of the bile passages, especially mentions the fact that "diseases of the bile passages, cholelithiasis, are frequently associated with lesions of the pancreas, and it is probable that inflammation can extend from the bile duct to the gland." Oser makes a similar observation, and Lancreux cites the possibility that "a gall-stone lodged in the common duct at the level of the diverticulum, may occlude the pancreatic duct and produce conditions favorable to penetration of micro-organisms into the pancreas."

The most frequent form of acute pancre-

atitis found in man is the hemorrhagic. This can be produced experimentally in animals by the injection of acids, bile, or other irritants.

In describing the pathological appearance of the organ, Fitz says: "The gland was frequently doubled in size, and might seem still larger when abundant fat tissue was present.

"The existence of hemorrhage was suspected by the appearance of the surface, which is of various shades of red. On section, however, the color may be dark red, reddish-brown, violet, reddish-black, or even black."

A careful distinction must be made between the condition of hemorrhagic pancreatitis and the so-called pancreatic hemorrhage or apoplexy, which may occur from trauma and cause sudden death.

The red and swollen gland of the hemorrhagic pancreatitis may undergo a change into a dark, slate-colored and foul-smelling mass, the gangrenous pancreatitis. The suppurative type of pancreatitis is divided into the primary, which originates in the pancreas, and the secondary from organs in its neighborhood by metastasis.

With the formation of pancreatic calculi, and the atrophy of the gland, there has often been observed diabetes. Flexner says: "Of the causes of the pathologic changes in the pancreas which produce diabetes, the chief one is supplied by concretions in the ducts. Of the 72 cases in the bibliography, 14 were due to the pancreatic calculi. (Hausman)." In diabetes, an atrophy or sclerosis of the islands of Langerhans is especially noted, and these are the structures principally concerned in the production of the diabetes. One can hardly fail to be convinced that Dr. Opie has proven the islands of Langerhans to be directly accountable for the regulation of carbohydrate circulation and elimination. He does not discuss the method in which this is accomplished, but he does include—logically from the facts as he finds them—that the presence of intact islands in fair numbers means the absence of glycosuria, and, conversely that their destruction is associated with sugar in the urine. This points conclusively to the presence of an internal secretion and places the pancreas in a sense among the ductless glands. He does not claim that all classes of diabetes are of pancreatic origin, but, by proving that many are, he paves the way for the broader contention." (Webster.)

There has been established a relation between a pathological condition of the pancreas and fat necrosis, from abundant clinical evidence. Experimentally it has been proven by ligating the ducts and allowing the

lymphatics to take up the retained secretion, or, where the organ has been lacerated, and the secretion has escaped into the abdominal cavity. The necrosis appears as white, or yellow-white foci, from the size of a pin point to a pea, and scattered over the peritoneum and in the neighboring organs.

The symptoms which lead to a diagnosis of pancreatic diseases are first modifications in the physiological excretions; namely, sugar in the urine and fatty stools, with undigested muscle-fibers; and second, local pain and tenderness over the organ, and possibly obstruction in the gastro-intestinal and biliary tracts.

Fitz of Boston has observed that "the symptoms which have proven most useful in diagnosis are those which call attention directly to the region of the pancreas. They are epigastric pain, tenderness, tension and tumor, with or without obstructive jaundice, and evidence of mechanical interference with the motility of the stomach and duodenum. Vomiting, sometimes frequent or incessant and often distressing, is customary among the early symptoms of acute pancreatitis, and constipation, at times obstinate, is the rule. So constant are these motor disturbances that the frequent diagnosis in cases of acute pancreatitis is intestinal obstruction."

The differential diagnosis in acute pancreatitis is then to be made between perforation of the digestive or biliary tracts, acute intestinal obstruction, and possibly an irritant poison, the latter cause easily eliminated, and the two former calling for surgical interference.

In chronic diseases of the pancreas, localized pain, especially after the presence of a tumor, the finding of sugar in the urine with fats and muscle-fibers in the feces, often lead to a diagnosis. Monyihan of Leeds mentions the fact that "many cases of pancreatic disease are discovered when operating for gall bladder disease. The great majority of our cases of pancreatitis have been discovered simply because we have gone a step further in our gall-bladder operations. Cammidge of London, has recently said, "The generally accepted belief that diseases of the pancreas are rare has to a great extent been due to a lack of recognition of the commonest of all pancreatic disorders, chronic inflammation."

The differential diagnosis is then between a chronic pancreatitis, possibly associated with calculi, cysts and tumors, not forgetting the association of diseases of this organ with jaundice.

In considering the surgical treatment of diseases of the pancreas, we are confronted with two important facts, namely, the con-

trol of hemorrhage, and the prevention of escape of pancreatic secretion from the injured parenchyma.

Von Mikulicz of Breslau says: "The pancreas is very rich in blood vessels, and hemorrhage from an injury is difficult to control. Simple tying of the tissues, is insufficient, and one must stop the bleeding with sutures deeply buried in the tissues, and including much of the latter which has the disadvantage of causing the parenchyma to necrose."

"In spite of deep sutures and heavy ligatures *en masse*, blood and pancreatic secretions ooze into the peritoneal cavity, preventing the formation of peritoneal adhesions, which in adominal operations in general are so important a protection."

The effect of this leakage of the pancreatic secretion has been demonstrated by statistics of resections of the stomach for cancer. In those operations where the pancreas was injured from freeing the tumor from adhesions to this organ, 70 per cent. died, while in those not involving the pancreas only 27.5 per cent. died.

The pancreatic secretion, by its local irritation of the peritoneum, allows the germs of sepsis a better opportunity to produce infection. Von Mikulicz has beautifully summed up this principle of infection when he says: "Even with the present stages of our aseptic technique, it is not possible to prevent all germs from reaching the abdominal cavity during laparotomy. An uninjured peritoneum will resist this infection if the germs are not introduced in certain quantities. But if the vitality of the peritoneum has been impaired by the action of the pancreatic secretions, then a very limited number of bacteria are sufficient to cause peritonitis." Murphy, of Chicago, has recently shown by his researches that irritation denudes the endothelial cells and in this way allows absorption of toxic products from the peritoneal cavity.

The greatest care should be used to avoid the escape of this secretion into the abdominal cavity, to thus prevent the intestinal paralysis, and later intestinal obstruction. Even when we are able to completely close the wounded parts by covering with a peritoneal coat, we should not fail to provide free and adequate drainage with a Mikulicz gauze tampon.

Statistics have clearly shown the wisdom of this method of procedure, when in 12 cases of stab, or gunshot wounds, eight were drained and six of the eight recovered, while of the undrained four cases three died. Mikulicz, to show the advantage of drainage, collected 30 cases operated upon for acute

disease of the pancreas, and found the mortality in those drained only 38 per cent, while those not drained showed 80 per cent. and he thus draws the conclusion that "Wherever the pancreatic tissue has been exposed at all, the abdominal cavity must be tamponed and drainage established."

The pancreatic diseases of most interest to the surgeon may be classified under three general heads, namely, the injuries, the inflammations, and the new growths. In the first class, the injuries, we usually have neighboring organs also damaged, thus often causing us to overlook any trauma to the deep seated pancreas, and on account of the amount of repair needed on these other structures, the operation is made more difficult. It is the firm conviction of the writer that many unexpected deaths have resulted from an overlooked wound of the pancreas, the case of the late President McKinley possibly belonging to this class.

The 45 cases of pancreatic injuries collected by Von Mikulicz show that 21 were penetrating and 24 sub-cutaneous from blunt force.

"Of the 21 penetrating wounds, 12 were of gunshot origin, and 9 were stab wounds. Of the gun-shot wounds, five were operated upon, two dying and three recovering. The seven that were not operated upon died. The nine stab wounds were all operated upon, one dying and eight recovering. Of the subcutaneous injuries, thirteen were not operated upon, and all died; of the eleven operated upon, seven recovered. (Von Mikulicz).

In the second class, the inflammations, the acute pancreatitis is of most importance. As this condition is now acknowledged to belong to the acute infectious processes, the treatment is of necessity the same as in other similar conditions, namely, to open the focus of infection amply and drain away the toxic exudate by gauze tampons. Statistics show that while only nine out of the 46 operated upon in the acute stage recovered, 18 recovered out of 35 when operated upon in later stages. When intestinal obstruction has occurred, an artificial anus in the cecum should be established to relieve the condition of intestinal paralysis, after the abdominal cavity has been thoroughly irrigated.

Until a comparatively short time ago, chronic inflammations of the pancreas were not considered amenable to treatment, but the observations of such men as Von Mikulicz, Reidel, Koerte, Lancereaux, Hardin, Halstead, and Opie, and Mayo, have shown that cases are not only improved, but cured by surgery. Gall stones located in the com-

mon bile duct at the diverticulum of Vater, occluding the pancreatic duct of Wirsung, may be removed, as also the true pancreatic calculi, giving relief.

Mayo Robson, of London, recently reported 102 operations, undertaken in patients where chronic pancreatic trouble constituted the chief disease or where it formed a serious complication of other diseases, with a mortality of 3.9 per cent.

In the last class, the new growths, cysts of the pancreas seem the most common, and 134 cases have been collected by Oser. Robson and Moynihan have classified these cysts in the following six groups: Retention, proliferation, hemorrhagic, hydatid, congenital and pseudo-cysts or peri-pancreatic cysts.

The retention cysts may be caused by the impaction of calculi, stricture, pressure from without, abnormalities of shape or position and closure of ducts by obstruction with parasites.

The proliferation cysts are multilocular and glandular tumors, lined with cylindrical epithelium, often containing blood-stained liquid, and occur near the tail rather than near the head of the pancreas. Many of these growths border very closely on malignancy.

The hemorrhagic cysts are either a hemorrhage into a cyst or are apoplexy of the pancreas and cystic degeneration in the resultant clot.

The hydatid cysts may occur, but are quite rare.

The congenital cysts are a congenital cystic degeneration of the pancreas, and hardly admit of surgical relief.

The pseudo cysts or peri-pancreatic cysts are really not cysts of this organ, but collections of fluid in the lesser omental cavity, so closely related to this organ that it is impossible to distinguish the difference. They probably make up a large proportion of the cases reported as cysts of the pancreas. These pseudo cysts may result from trauma, and for this reason have been found most often in men, while the true pancreatic cysts occur most in women.

Roswell Park, of Buffalo, in a recent paper says: "These tumors may be present above the stomach, below it and between it and the colon, or behind them both." They usually appear between the stomach and the colon. He further says: "The diagnosis has to be made generally from—

1. Local peritonitis with fluid accumulation.

2. Cholecystitis and distended gall bladder.

3. Hydronephrosis and other fluid tumors of the kidney.
4. Ovarian cysts.
5. Hydatid and other cysts of the liver.
6. Adrenal cysts.
7. Mesenteric cysts, including cysts of Mullerian and Wolffian, remains in mesocolon.
8. Omental cysts.
9. Splenic cysts, hyatids, etc.
10. Cysts of the stomach wall which have, in at least two cases, closely simulated pancreatic cysts.
11. Retro-peritoneal lymph or other cysts.
12. The pseudo cysts.

The operative treatment of these cysts consists of opening with drainage or complete enucleation. Aspiration is never to be resorted to, and is strongly condemned by all who have had experience with these growths.

If drainage alone is attempted, it is probably best performed by a posterior incision through the muscles of the back, although it has been done by stitching the tumor sac to the anterior abdominal walls, or a tube and gauze drain can be introduced down to the cyst if it is small.

Complete enucleation of these cysts, just as in ovarian cysts, is of course the ideal treatment.

Ransahoff, of Cincinnati, has collected 159 cases of pancreatic cysts operated upon, of which all except 34 were anchored to the anterior abdominal wall and drained, only five dying. In 23, total enucleation was made with two deaths.

Carcinoma is the principal solid tumor of the pancreas, and the collected statistics show that it occurs only in about one out of three or four hundred autopsies. Park says: "Cancer is by far more common in the head of the organ, which like the biliary passages is most open to infection, more than half of the cases appearing here." "Terrier has extirpated one as large as the patient's head, which weighed 5 1-2 pounds. Several times these tumors have been found the size of a fetal head."

Ruggie, of Bologna, in 1890, performed the first successful removal of a cancerous pancreas. Of 16 collected cases operated upon for this condition, eight died shortly after the operation, and the others made a temporary or permanent recovery.

Tuberculosis and other diseases of the pancreas are rare. In conclusion, the writer can do no better than to quote the words of Maurice Richardson, of Boston, when he says: "On the whole, therefore, the surgery of the pancreas is encouraging, even in the most aggressive lesions. It is a field, however, which encourages abundant research, the results of

which let us hope will add a new chapter to the brilliant achievements of medicine and surgery."

RELATIONS OF HEREDITY AND EARLY ENVIRONMENTS TO DISEASES AND DEFECTS OF CHILDREN.*

BY VERNON BLYTHE, PADUCAH.

The future greatness, morality and prosperity of a state or nation rests upon the children of to-day. Their inheritance from ancestors will play a great part in the resulting development of body and character, but effects of early environment will be equally as great, or a greater factor, in moulding the physical and mental condition of the individual.

Laws of consequence have been repeatedly ignored by the medical profession and the gravest faults laid to heredity. Family histories have been made the excuse for a multitude of sins, so that the fallacies arising therefrom have often obscured the intellectual horizon of conscientious men, bringing an injustice and neglect to the children, because the professional man has conceived that the laws of heredity are as immutable as those of the Medes and Persians.

A subject of the breadth of the above must of necessity, in a paper of this length, confine itself to the salient points of heredity and the principal diseases and defects of childhood.

Specific forms of diseases are rarely directly transmitted, their number possibly being counted in the range of twenty, but the predisposition of children to acquire physical and moral defects from their parents are innumerable, and whether they shall so be burdened and handicapped depend often upon the course of their early life.

Heredity may be divided into two great classes—Congestion or Immediate and Predisposed. It is hard at times to tell when the division begins or when it ends.

Immediate Heredity explains some startling facts. Tissues adhere to type. Characteristics of the Hebrew have not been blotted out through three thousand years of adverse circumstances, under all the diverse climates of the earth. Centenarianism is not so much a product of habits as heredity, proverbial among certain families, the list includes all classes of men. It may be the scholar bending over his studies year in and out, or the mountaineer following his avocation in the

* Read before the McCracken County Medical Society, July 2, 1907.

rough inclement weather of the highlands.

Modification of formerly important organs, though no longer of any special use, are long inherited in man as well as beast. Atavism or reversion to an ancestral type of structure has been time and again observed, taking on their weaknesses, or their peculiar strength. The Prince Imperial son of Napoleon III was a Spaniard in every physical and mental way, not like father or mother, but great grandparent. At birth there is bound in the infant the essence of that which will make the kind of being he shall become. Degeneracy and acquired evil disposition are transmitted by direct heredity. Criminal propensities are often a gift of the criminal parents.

Insanity and Epilepsy have been shown in 33 1-3% of cases to be directly inherited; nervous, hysterical parents directly transmit nervous temperament to their offspring. Among nervous diseases there are a few directly inherited, Hereditary Cerebral Diplegia occurring in children 1 to 5 years old when spastic paralysis and imbecility are the results. Mothers transmit neurosis more than fathers, which may skip a generation and show in the next.

Deaf mutism are often seen directly following similar defects in mother, but more often it is acquired. Hereditary Spinal Paraplegia or Friedreich's Disease usually begins from dentition to puberty, with tremor, nystagmus, sclerosis in posterior or lateral column of spinal cord.

Hereditary Hemiplegia, we find hemiplegic parents with diseased condition which often cause similar conditions in their children on birth. A syphilitic mother will give birth to a syphilitic child which may manifest itself at birth or remain latent until puberty, without any symptoms. It is an undecided question whether the virus of syphilis can be transmitted to the foetus by father without mother having the disease, but the mother either has syphilis or is rendered immune by being pregnant with a syphilitic offspring, the former proposition seems more plausible.

Haemophilia or a tendency to profuse uncontrollable bleeding is a disease of markedly hereditary character, especially transmitted through the mother though she may have escaped the family weakness.

As we study the history of tumors and especially some of the malignant ones, it is indeed a sad outlook for one who has had a strong family history of their existence. Carcinoma is the one that shows a decided hereditary tendency. Broca relates an incident where fifteen out of twenty-six in a family died of it. The Great Napoleon, his father, one brother and two sisters succumb-

ed to carcinoma of the stomach, 12% to 15% can be traced to hereditary.

There are quite a large number of anatomical, physiological and psychical anomalies, stigmata of inherited degeneracy, as facial asymmetry, deformities of palate, albinism, dwarfishness, giantism, spina bifida, epilepsy, tremor, hypersthenia, migraine, deaf mutes, hypermetropia, sexual perversion, insanity, imbecility, moral delinquency, etc.

There are certain congenital anomalies of the heart in infants which are often so serious that the child lives but a short, uncertain time. Imperfect development of heart septa, false closure of ventricular septum with cyanosis and systolic murmur. A mother with serious kidney lesion often gives birth to a child with marked renal defects.

Tuberculosis which kills more people than any other disease in the civilized world has long been held to be an inherited trouble, but direct intra uterine transmission is rare, yet it has been established beyond a fact, the placenta is found often tubercular, tubercular condition of the organs of the child have been observed soon after birth, scrofula or tubercular adenitis is by far the most common form of inherited tuberculosis. Dr. Holt reports one child twenty days old which died of general tuberculosis, another three months, and one seven weeks old whose mother had died eleven days after birth of child. It is an established fact that tuberculosis can and is transmitted directly from the parent, but the great majority of tubercular cases acquire the disease.

Asthmatic conditions are seen to be transmitted from parent to children. Malnutrition and strumous conditions in children cannot at times be overcome because the reactive power of child is below par from birth.

There are certain questions concerning heredity which, upon the very mention, suggest our most thoughtful attention: Does a parent directly give as a cursed heritage the vicious cravings for drugs and alcohol which destroy the very soul of man? There are many strong evidences that children inherit a certain indefinable, nervous, aching, longing for certain drugs and fluids which were destroying and devitalizing their parents at their conception and at their birth (possibly noted in dipsomania or the inordinate periodical drinking, especially noted at times in young men whose parents have formerly yielded to the habit. However interesting the problem of direct or immediate heredity may be, that of predisposition to disease and defects are fully as much so because far more numerous, and more amenable to control.

The heredity predisposition to disease and defects in children is far reaching, but there is one grand, hopeful, redeeming thought in this galaxy of human frailties and weaknesses—that there is born within us that elementary *will power* which if cultivated and trained will often overcome many adverse hereditary taints, the leavening hope of the human race. In continuing the thoughts we find that children of alcoholic parents often have a deficiency in mental control, a low vitality, a physical degeneracy, and moral obtuseness making them susceptible to debasing external influences, hand in hand with the considerations of this powerful predisposition in the child to the abnormalities of life we might look to a solution of many of the problems by carefully observing and correcting their early environments.

The predisposing causes to Tuberculosis are very strong and powerful, the child has weak tissue, poor quality of blood, poor digestion, susceptible to glandular infection, undeveloped thorax, yet without a tubercular germ within his body, although his parents may have it previous to birth. By being carefully watched over, well nourished, taken out of the infectious area of the disease, such children grow time and again to become healthy, robust adults, early environments well guarded are the only guarantee of their safety.

Life's cycle is constantly changing. The offspring may be a very different individual from his parents. Environments and adaptation often give a man world-wide fame; no one can account for the mighty breadth and depth of Lincoln's soul and statesmanship by his parentage, neither can the towering military genius of a Napoleon be explained by his practically obscure Corsican ancestry, yet we think we know why Ralph Waldo Emerson reached the highest range of human intellectuality, because for generations his forefathers had been scholars and students of the widest scope of knowledge.

Most every organ in the body may have hereditary tendencies to disease. Hebrews have a peculiar specialty in glaucoma, the negro in phlyctenular disease, the Yellow Races or Tartar in epicanthus and in certain families ptosis tendencies seem to be a favorite.

Malnutrition of children may come through inherited tendencies, yet thousands of these cases continue miserable on account of improper feeding and nursing, where they are kept in hot stuffy quarters with all the unsanitary environments possible to imagine.

Lead poisoned parents have devitalized offspring, yet close attention will often bring

health and vigor to their emaciated poisoned bodies.

Adenoid growth show often a very strong hereditary tendency, often in parents and in all the children.

Nervous diseases show among children a powerful birth mark, not that the defect is directly transmitted from parent to child, but a strong nervous temperament is passed into the offspring. All hereditary nervous diseases predispose to epilepsy, which is or may result from convulsions of childhood, when there is a non-development of the voluntary centres of the brain. Chorea often-times shows evidences of the hereditary influence, especially in families of a rheumatic diathesis. The surroundings often have as much or more effect on this character of children than anything else, poor food, troubles at home, little recreation, overwork in close school rooms.

Headaches have been the bane of many a young girl's existence continuing on into womanhood with varying intensity. The causes of headaches are legions, many of them are no doubt attributable to neurotic temperaments inherited, and diseases of the spine, organs of sight, hearing, nose and throat troubles. Perhaps as many are due to poorly ventilated rooms, malaria, malnutrition, worry, indigestion and constipation, most of which can be rectified by proper surroundings and systematic attention freeing the little sufferers from the terrible incubus under which they live.

Rickets cannot be said to be an inherited disease, yet the child tissues are often early in life so far below par that ossification is long delayed and misery and deformities result. Criminality is very near a result of disease through improper brain development in certain areas, so evident that the propensities have been known to continue through six generations as in the remarkable case of "Margaut Jukes," when out of 709 individuals the majority were either murderers, thieves or idiots. Lower types of animals show on anatomical examination fewer brain cells and an absence of the connecting fibers which so markedly distinguish the human from the lower creation. Recent scientific investigation of the anatomical features of lower races show this same peculiarity, and especially those of the negro race presenting more animal characteristics which are incapable of conceiving those thoughts which control the modern civilization of the world. Political demagogues and certain misguided educators and philanthropists imagined that enfranchisement and superficial education was a panacea for all the ignorance and

crimes in the lower race, but how woefully the history of crime and degeneracy belie this assumption in the past twenty-five years. Centuries of careful training cannot make these befogged brains of 5000 years standing grow into a type of the Anglo-Saxon form. With all our boasted American education, our extensive university system and our wide spread public school records, no civilized nation has for the last ten years had proportionately such a record of crime to face. The fearful thought that there were in 1904, 9,240 suicides, 8,976 murders, lynchings aggregating some years 125 to 200, surely ought to make all thoughtful minded people ponder long over the question of heredity and early environments of the coming generations. One of the most important propositions which confront parents and physicians in relation to children is, how to keep them out of the environments of infectious diseases. The old foggy idea that children should have measles, mumps, pertussis, etc. while young was only a relic of barbarism as much so as that young people should sow some wild oats, destroy their health by contracting some repulsive, cursed disease and poison the very kernel of their purity, desecrating the threshold of their early life. Young infants are not as easily affected as a rule by measles as old children, yet as it is directly contagious, infrequently by clothing, furniture, rarely by a third person, it is necessary that they be protected from the persons having it.

In scarlet fever all excretions should be destroyed, milk, food, cats, dogs, clothing are sources of infection when coming in contact with the patients. In the convalescent stage of desquamation, children should be carefully protected from association with the infected one. Infants are particularly susceptible in the winter and spring months to pertussis, whose bad effects are not fully appreciated and if possible all care ought to be exercised in preventing the infection in the very young, the outcome of which is often broncho pneumonia and death or emphysema of the lung. Acute tonsillitis, pneumonia, rheumatism could often be prevented and warded off the child if sensible precaution were exercised. The largest per cent. of acute endocarditis is secondary to acute tonsillitis, rheumatism and pneumonia. Direct infection will account for the greater number of diphtheria cases. It is particularly found in the saliva, excretions of nose and throat. The length of time a patient is dangerous is still an uncertain quantity. Indirect infections are not unusual, may be caused by milk, rarely water, by toys of patient, tongue depressor and occasionally by a third person if they have

come in close contact with the sufferer, from all of which typhoid fever is rarely found in children under five years old, but if the infection be strong enough they do succumb.

Heredity immediate and predisposed no doubt play a powerful part in the diseases and defects of humanity, but it is often a blind excuse for a disobedience to the law of nature by those who are hunting causes for their own weaknesses. Many individuals become morbid by allowing themselves early in life to imagine they are peculiar and different from others. Many a child is shy because their fears are not soothed by older people and thoughtless friends. People as they pass into adult life often forget that they are surrounded on every side by a world inhabited by a little people who are just appearing on the brink of existence, whose little thoughts and actions seem to themselves to be of the greatest importance. Their troubles, sorrows, pains and loves are just as real and earnest for the fleeting time as those of the matured man or woman. Lack of knowledge and worldly experience, with the immediate heritage of parental weakness cause them oft-times to grope blindly in their bewildered way for relief from strong hereditary tendencies or depressing environments overburdening their struggling wills. We physicians or older children might more constantly keep in mind as we come in contact with these little ones that early life has many pitfalls in its way of progress, in the forms of inherited weakness and propensities, often magnified by the impediments of miserable environments, which great and important fact should never be forgotten in our advice to parents and care of the young.

BIBLIOGRAPHY.

- P. A. Morrow, A. M. A., Vol. 10—455 page.
 Homer Wakefield, A. M. A., Vol. 9—526.
 J. E. Weeks, Medical Record, Vol. 64, No. 6.
 F. W. Mott, British Med. Jour., Oct. 28, 1905.
 Emmett Holt, Diseases of Childhood.
 Broca, Diseases of Childhood.
 Strickler W. M., "Transmission Character."
 "Ashby & Wright", Diseases of Children.
 Dana, Nervous Diseases.

SPIROCHAETA OF SCHAUDINN AND SYPHILIS.*

By IRVIN LINDENBERGER, LOUISVILLE.

I present to your attention to-night a pathological specimen in which the spirochaeta of

* Read before the Society of Physicians and Surgeons, Louisville.

Schaudinn and Hoffmann is very prettily shown. The specimen is from the lung of a child six and one-half months old suffering from hereditary syphilis; but who died of pneumonia. The method of staining this preparation is after Levaditi who first demonstrated the spirochaeta in tissue. In this connection I might say that the spirochaeta are better found in tissue than in the secretions of syphilitic lesions. The technique of staining is as follows: The specimen is placed in a ten per cent. formalin solution for one day, then ninety-five per cent. alcohol a day, when it is washed with distilled water; for three days allowed to stand in an oven at a temperature of 98 degrees F. in one and one-half per cent. solution of silver nitrate, allowing of course no light to enter on account of the effects of the solution. The tissue is then placed direct in a two per cent. solution of pyrogallie acid to which a five per cent. solution of formalin is added and kept in the dark for 24 hours at the temperature of the room. After hardening in increasing strengths of alcohol, it is embedded in Xylol-paraffin. The tissue can also be fixed in Muller's solution. The best specimens for examination are those cut quite thin.

Smears from chancre are stained quite well with Giemsa's Solution. The top of the chancre should be scraped and smear obtained from ulcer. The cover glass or slide is placed in alcohol and smear fixed for ten minutes, then stained with Giemsa's Solution for 24 hours. The spirochaeta can also be found in papules and in ulcers in the mouth of secondary stage. As regards gumma, Landsteiner reports that he was unable to demonstrate the spirochaeta, but he twice infected monkeys from this source, so it is very possible that humans could be infected by this means, though it has been amply demonstrated that the contagion of the gumma is comparatively speaking contagious in the lowest degree compared to the other lesions. In sections of gumma the spirochaeta are found in the periphery in greatest number, very few if any being in the center.

The spirochaeta are one of four groups of the Spirilla family. The two other slides, one showing the *Leptothrix Buccalis*, I took from my own throat, having at the time a mycosis tonsillaris. This is a bacterium and not included in this group. The other is from the blood of a hen. In relapsing fever this spirilla is present and was thought at one time to be the spirilla of yellow fever. It is of no practical importance.

To refer again to the Spirochaeta of Schaudinn. A peculiar fact associated with syphilis is that more spirochaeta are present in

the secretions at night than in the day time, and while not seeing it mentioned this may in some manner account for the headaches at times accompanying which are worse at this period. Many former views that have been entertained regarding syphilis have been shattered by this discovery, but at the same time we are just entering an era in which much that has already been discovered will have to be more fully corroborated and proved. Summing up we do know that the Spirochaeta Pallida has been found in lesions of acquired and congenital syphilis, that it has been found in lesions obtained by inoculation into higher and lower apes, and that it is not found in non-syphilitic lesions. The question arises as to whether the Spirochaeta Pallida is the cause of syphilis or is it only present in syphilitic lesions.

Inoculation experiments carried on in Metchnikoff's laboratory are most interesting, especially regarding re-infection. Inoculation from higher apes to human beings naturally have not been done. However, in this laboratory two instances occurred. One voluntary, a woman 79 years old was inoculated from lower apes. No secondary eruption appeared in either, though in the lesion of the man the spirochaeta was demonstrated. While not directly bearing on the subject, as regards the evolution theory it is interesting to note that in apes of higher and lower species, those of the higher and nearer approaching humans, i. e., anthropoids react similar to the human species, while in the lower infection is somewhat more difficult to accomplish. Referring again to infection, if an ape was inoculated a second time before the appearance of the chancre of the first inoculation, or even sometimes after its appearance, after a certain incubation period a second chancre would appear at the point of reinoculation. No result could be obtained from reinoculation during the development of the secondary eruption. In later periods during the presence of tubercles or gummata the effect of reinoculation would be a tubercle or gumma. In other words, the system responded to reinoculation with external virus in the same manner as it reacted upon its own syphilitic virus. These facts are in gross contradistinction to our previously accepted conception of immunity in syphilis.

We understand immunity as a condition in which with the appearance of the primary lesion the affected organism while reacting upon its own virus was absolutely immune to new infection, at least through the whole active course of the disease. Experiments prove that reinoculation is possible through the whole course of the disease, the system hav-

ing a partial immunity, varying in intensity, increasing gradually with the appearance of the primary lesion, reaching its maximum during the skin eruption and diminishing by degrees until virus and immunity both disappear. In clinical observations when several ulcers appear in succession after the development of the first lesion they should not solely be considered as due to a mixed infection, but could be regarded as the product of super-infection by the same virus that caused the first lesion, their milder course being due to the milder reaction of the partially immunized system. Formerly, we regarded as necessary a chancre, skin lesion and enlarged glands, when re-infection took place. But at present we have to accept two forms of re-infection; a partial one, corresponding to the partial immunity of the system, and an absolute re-infection in cases where the system is entirely free from virus and immunity. Such latter cases may happen, but the disease would have to be contracted very early in life for those syphilitics and otherwise, for in their old age they are not as a rule physically in a condition to expose themselves to new infection.

A word as to serum diagnosis. This subject is quite new, and as yet observations naturally limited, but this much has been amply demonstrated and proved by this method whether a given syphilitic is cured or the disease is only latent. The role this will play especially in brain surgery where an early diagnosis in tumors is demanded, is apparent.

Regarding syphilis and tabes, Hyde says: "Syphilis is without question a precedent fact in more than ninety per cent. of all cases of tabes." Mobius believes all cases of tabes are due to syphilis. Fournier in two hundred and forty-nine cases of tabes found two hundred and thirty-one in which there was undoubted syphilis, a percentage of ninety-three. Erb and Strumpell say ninety per cent. It effects ten men to one woman, and is rare in the negro. I have seen one case in a woman, and two in the colored race. This phase of the subject regarding woman has always been of interest to me, and I have heard no explanation of it but one. This as far as I know has not been in print, and was given me by one of the visiting medical men at one of the New York hospitals. He says that many years ago it was a fact that men were

more able to perform the act of copulation than they are now, and from so doing left in their train fagged out women who were not able to stand the nervous and physical strain of so much intercourse and tabes amongst them was common. In this day and generation it is the women who are able to hold out longer in this respect than the men, and we have a reversal of the condition. You can form your own conclusions.

Wasserman of Berlin has done much in the serodiagnostics line. Schultze after testing and corroborating the findings of Wasserman and others, reports twelve cases of tabes between 22 and 35 years of age. In four syphilis was absolutely denied. In eight syphilis was admitted. In the latter, the reaction for syphilis was positive, and in the four negative. This offsets the high percentage as to the relation of syphilis to tabes, and we can no longer regard it as the sole cause, but of course admit its etiological importance.

Serotherapy has as yet not proved a success, as it has been impossible to obtain an attenuated virus. Mercury is our remedy par excellence. Since it has been proved that the internal organs are involved in the early period of the disease, the active virus not only preparing the ground for the destructive tertiary manifestations in those organs but also itself remaining active and virulent during the tertiary period, the salutary specific action of mercury must be brought to bear upon the virus intermittently for a protracted period in both stages of the disease.

"THE MALARIA BUG."

By W. H. MACCRACKEN.

Here's a suggestion
For State Board question,
With answer cut and dried.
That in effect
It's quite correct
Is not to be denied.

Question:—

Describe as fully as may be
Plasmodium malariae?

Answer:—

Plasmodiusses
Are little cusses
That make you chill and sweat.
And if you find 'em
When you've quinned 'em
You'll have to hunt! you bet!

REPORT OF CASE OF CARCINOMA OF THE INTESTINE.*

By A. P. DOWDEN.

As I have under my care at this time a rather unusual case I thought possibly it might interest you.

C.C.C., male, white, married for 47 years, always been a man of exemplary habits, occupation farmer. Family history: Father died in 66th year of some obscure stomach trouble, mother living subject of chronic interstitial nephritis, one sister in good health, one brother has had several attacks of catarrhal appendicitis. Patient has had three attacks of pneumonia, otherwise in good health until about four years ago began to suffer from indigestion, alternating attacks of diarrhoea and constipation, which was relieved by broken doses of calomel or a few days at some watering place. Past two years these attacks have increased in frequency and severity. When he came to me in June I found him with marked anemia, weak, nervous, pulse slow, loss of appetite, temperature subnormal. Upon examination I found on a line and to the right of umbilicus a hard, globular movable mass of size of lemon. On administering ounce of castor oil it produced intense griping with frequent small stools. As he was very much below par it was thought to get him in better condition before operating. For two weeks he was given hypophosphites with liquid diet, and laxative every other night. At the end of that time he was passing blood and mucus in stools, and rapidly losing ground, so that an immediate operation was urged, which was performed by Dr. Vance, July 11, 1907. The exploratory laparotomy revealed a carcinoma of the scirrhus type, within the transverse colon a few inches from the right hepatic flexure which was removed with five inches of the intestine. The patient left the table with no shock and with the exception of hiccoughing for several hours, which was possible reflex, was none the worst for the operation. Until the ninth day, when by possible indiscretion in diet, the patient suddenly became nauseated and vomited at intervals for twenty-five hours, which was relieved finally by washing out the stomach and enemas.

The vomitus consisted of black material, mixed with blood at one time, again there was considerable hiccoughing, which stopped immediately after stomach tube was used by Dr. Lucas. On the 13th day after operation he was removed to his home, some forty-one miles. During his stay in the infirmary his

temperature ranged from 99-102, pulse 60-66.

The second day after reaching home his temperature and pulse became 98½-72 respectively, and has remained so ever since. On 16th day after operation he was put on solid food and allowed to sit in chair. To-day, 19 days from operation he is walking to his chair, sits up hour at time, seems to be on rapid road to recovery. The most interesting point in this case is the future prognosis for him, and I could not do better than quote Dr. Vance:—"Uncertain, may or may not recur, do not think there is any other growth present now."

Before closing I wish to say the lumen of the gut was so nearly closed by the growth it would not admit a small lead pencil. The remarkable points in his case to me are:—for the man to get in so dangerous condition with so few symptoms. He had never lost a day's work, not passing blood sooner, the displacement of the transverse colon, age, and his rapid recovery.

PERTUSSIS.*

By L. F. HAMMONDS, LIBERTY.

This is an acute infectious disease manifesting itself, at the onset by catarrhal symptoms confined chiefly to the upper respiratory passages, and of which the cough toward the end of the second week assumes a peculiar convulsive character known as the "whoop."

Symptoms: After a varied incubation period of from five to thirteen days, the symptoms of a more or less severe coryza present themselves; a coryza at the onset unable to distinguish from that due to other diseases. The cough at this period is not characteristic; it gradually, however assumes a paroxysmal character and is more frequent during the night than is the case due to other causes. At this stage it is seldom that any sounds are to be heard in the chest, toward the end of the second week and during the third week the characteristic cough develops. The child recognizes its oncoming and tries to suppress it, or runs to its mother for support; a series of quickly repeated short coughs burst forth and persist until the chest is in a state of extreme expiration; the face becomes congested and cyanotic, then follows the long drawn out inspiration accompanied by the characteristic "whoop," this may be repeated two or three times. The paroxysm generally ends with the expulsion of a large quantity of clear, thick, tenacious mucus from the upper part of the throat. Vomit-

* Read before the Henry County Medical Society.

* Read before the Casey County Medical Society, July 25, 1907.

ing with complete unloading of the stomach, frequently takes place at the same time. In delicate children and especially infants the paroxysms produce great exhaustion, and the little patient falls back with a livid face and pulse almost uncountable; the great strain may also induce tenderness of the respiratory muscles. The frequency with which these paroxysms occur vary much according to the period of the disease and severity of the attack. In mild cases, eight or ten, in severe cases twenty or thirty, may occur in twenty-four hours. Their severity is also variable, both severity and frequency of the spasms are greatest during the first two weeks of the spasmodic stage, after which they gradually lessen. In some cases the characteristic "whoop" is absent.

Diagnosis: During the catarrhal stage it is difficult, except in those cases in which we know there has been a direct exposure to distinguish between pertussis and a catarrhal condition arising from other causes. Toward the close of the catarrhal stage, the spasmodic character of the cough, its frequency and severity during the night. After the second week the cough generally becomes characteristic and is easily recognized.

Etiology: The clinical history of the disease points strongly to the existence of a specific organism to which the catarrhal and nervous symptoms may be more or less attributed; but so far pathologists have not determined with certainty the micro-organism. It appears that several micro-organisms have been found with sufficient frequency in the sputum of children suffering from pertussis as to be regarded as the exciting cause, but at the present no one germ is universally recognized as such. The contagium is thrown off from the respiratory tract, chiefly in the sputum; the disease seems to be readily communicated through the air even for a considerable distance, and appears to be specially contagious during the catarrhal stage. Like other infectious diseases pertussis generally occurs in epidemics, which are more frequently met with during the spring and autumn months, in early infancy it is peculiarly severe and fatal.

Pathology: In simple uncomplicated cases, beyond a catarrhal inflammation of the larynx and trachea little is to be noted. In severe cases the inflammation may extend to the smaller bronchi. In fatal cases the tracheal and bronchial glands are found enlarged; more or less extensive catarrhal pneumonia is generally present.

Complications and sequelae: In every case of whooping cough more or less tracheitis is present, which under imperfect hygienic

conditions or under exposure, readily becomes converted into a bronchitis, adding violence to the symptoms, it becomes still more severe if a broncho-pneumonia develops; a condition indicated by a sudden rise in temperature and increased dyspnea. This complication adds greatly to the fatality of the disease, some emphysema of the lungs is probably developed in every serious case. The digestive system is in every case apt to be more or less deranged; vomiting in some cases is a troublesome complication, and may interfere with necessary nutrition. A catarrhal condition of the intestines producing diarrhoea is liable to occur in infants during the summer months. In all children an attack of pertussis appears to induce an increased irritability of the spine and cerebral centers. Convulsions are liable to occur, due in some cases to merely temporary causes; in others to severe cerebral lesions such as intracranial hemorrhage or thrombosis, and followed by more or less extensive paralysis, and sometimes by disturbance of sight and hearing. Epistaxis occur frequently; subconjunctival hemorrhage is more rare. Among the more important sequela of the disease are various chronic pulmonary affections: emphysema, chronic bronchitis, asthma, and chronic interstitial pneumonia, it is to be remembered that after an attack of whooping-cough has run its course latent tuberculosis may suddenly show indications of activity, the heart may show signs of over strain. We often have an acute nephritis which may prove very severe.

Prognosis: Pertussis is more to be dreaded during the winter and spring months than in the summer. The mortality is very high when an attack develops in early infancy, especially in tubercular children. The disease is very fatal when a broncho-pneumonia develops, in children over six years of age serious complications are rare, in a large number of cases a catarrhal affection of the mucous membrane develops and is liable to prove most fatal by lowering the resistance of the body to the toxic effects of the infection.

Treatment: The treatment is by general confession, not satisfactory while it is among the hopes that may be realized in the future, that we may be able to limit the duration and severity of an attack. At present no internal medicine appears to affect any distinct reduction as what may be regarded as a typical course of the disease. Nevertheless by careful hygiene and judicious management we may do much to lessen the number and severity of the spasms and prevent complications. The patient should breathe pure

air not too dry, cold draughts, strong winds and sudden atmospheric changes are to be avoided, as it is liable to increase the catarrhal conditions present and give rise to severe pulmonary complications. In cold winter weather the child should be kept in a well ventilated room, but in nice summer weather the child should spend the entire day in the open air and at night the room should be well ventilated. Food should be very nutritious and given often, excitement of all kinds should be avoided. As to the medical treatment we have no specific and have to treat symptomatically, creosote vapors sometimes give excellent results and is claimed by some to shorten the attack and prevent other members of the family from taking it, the most convenient way to use it is to saturate a cloth with it and hang it in the room, the strength of the inhalation can be regulated by the number of cloths, this plan of treatment is not advisable when there is moist rales in the lungs, the inhalations should be commenced early and continued, internally, sedatives and antispasmodic medicines may be administered with the object of allaying the nervous irritation and checking the spasm. Among the most generally employed are the bromides, belladonna, atipyrine, and chloral-hydrate.

COUNTY SOCIETY REPORTS.

Anderson—The Anderson County Medical Society met on the afternoon of August 5th, with J. R. Murdock at Alton. J. W. Gilbert, Kavanaugh, Paynter, Murdock, Pindar, of the society were present, also E. E. Hume and Williams of Frankfort.

Both members to whom papers had been assigned were absent and J. R. Murdock made the meeting of the society very interesting and instructive by presenting several clinical cases.

One, a case of nervous trouble of long standing, presenting a number of interesting features which were brought out by E. E. Hume in a careful examination before the society.

A case of caries of vertebrae that had been before the society, was brought in and examined again.

An interesting case of fistula in ani was next. Operation immediately was recommended by all present.

E. E. Hume and Williams were elected honorary members of the society and both made nice talks in thanking the society for the honor.

The society meets with Dr. Milton at Fox Creek, on September 2nd, at 2 P. M.

J. W. GILBERT, Secretary.

Allen—William B. Ray, of Scottsville, a member in good standing in State and County societies, died this morning from an apoplectic stroke.

A. L. WAGONER, Secretary.

Casey—The Casey County Medical Society met in I. S. Wesley's office on the 25th of July, 1907. The meeting was called to order by the vice president, I. S. Wesley. The following members were present: Pierce Martin, D. S. Floyd, John Hughes, Wiser Cox, J. T. and I. S. Wesley and L. F. Hammonds.

Pierce Martin presented a case of tuberculosis of the humerus. I. S. Wesley recommended the removal of all dead bone and if necessary remove the arm.

D. S. Floyd then read a paper on the diagnosis and treatment of typhoid fever, the paper was a good one and the ground well covered.

DISCUSSION.

L. F. Hammonds recommended baths and that the patient be given large quantities of water and the injection of normal salt solution into the bowels, two or three times in twenty-four hours.

J. T. Wesley recommends removing all furniture from the room that is not necessary for the patient and the use of two beds, air one while the other is being used. Cleanse the alimentary canal with calomel followed by castor oil. Watch the temperature to keep it down. The sponge bath is the best for country practice, keep the bed linen clean and disinfect the stools. Cases do not recover in ten to 12 days, if they do you have been treating another disease for typhoid. You see in the Journals that men claim their patients recover in from ten to twelve days, but I do not believe it.

W. D. Cox: I use the sponge bath freely. I think it the best way to keep the temperature down, especially in country practice.

I. S. Wesley: We have a mixed infection in this locality, of malaria and typhoid. I think we feed more than the patient can digest and when he can not digest it it does harm. I think the appetite a good guide as to the amount during the febrile stage. Water is the thing to control the fever with, the sponge bath and wrap the patient in wet sheets. Do not dry the patient with a towel but let the water evaporate. Clean out the intestines and keep them clean. Stimulation should be used at the proper time, strychnine is good but should not be commenced too soon and should be watched.

Dr. Hammonds read a paper on "Pertussis," which was discussed by all.

D. S. Floyd said the complications are what we have to dread. We sometimes have paralysis of the heart due to toxemia from kidney or cardiac centers. I use white pine compound with

heroine to lessen the cough and allay the irritation.

J. T. Wesley: The paper was an interesting one; the disease is contagious as most diseases are contagious and I think we should promulgate this fact. The disease is due to a microbe but so far none has been located. Older writers claimed that it was one of the neurosis but this is not true. Place the patient in the best surroundings possible as well as in all other diseases. The people need a great deal of instruction along this line. Some epidemics of pertussis is very mild and some very severe; about all we can do is to treat the complications.

I. S. Wesley: It is the complications that gives the trouble and to look after these and to the general management is about all we can do as we can not cut the disease short. As to the medicine, I rely on belladonna and antipyrine.

The next meeting will be at Liberty, on the 26th day of September, with the following program: "Placenta Previa," Pierce Martin; "Pneumonia," W. T. Gardner; "Management of Labor," Wiser Cox.

L. F. HAMMONDS, Secretary.

Henry—On September 11th, the Nelson County Medical Society will hold a general meeting at New Haven. The physicians of Washington, Marion, Green, Taylor, Larue, Hardin and Bullitt counties are especially invited to be present. Secretary Rodman announces the following interesting program:

"Erysipelas," J. I. Greenwell, New Haven.

"Spina Bifida," Charles McClure, Cox Creek.

"Care of the Pregnant Woman," Basil M. Taylor, Greensburg.

Dinner.

At 2 P. M. W. F. Boggess, of Louisville, will deliver a lecture on tuberculosis to a mixed audience. This and the other papers, and especially the dinner, will be discussed by all present.

Every doctor in the District is urged to be present at this meeting.

H. D. RODMAN, Secretary.

Proceedings of Jefferson County Medical Society May 27, 1907.

These are J. G. Sherrill's original notes on Partial Gastrectomy for Gastric Ulcer. J. E., white, aged 50. Father fell off a car and later a growth formed in chest which prevented his swallowing. Diagnosed as cancer of the oesophagus. Mother died of softening of the brain. Younger brother has two or three knots on his head probably sebaceous. Personal history.—Has always been a great eater. Had scarlet fever at four years of age. Had walking typhoid fever sixteen years ago. Thirty years ago he had two sores on penis and suppurative bubo, but no secondary symptoms. Has always been constipated. Years ago drank whiskey

and beer, latter most. For last sixteen years has not been drinking any liquors. Four or five years ago had watery, bloody stools which he thought due to piles. Present trouble dates back three and a half years while working in a tannery wheeling bark. It came with a diarrhoea and a few days later he began to have pain and burning in stomach like a red hot poker, eased by baking-soda. Pain began from two and a half to three hours after eating—slower in appearing when meat and solids taken earlier when fluids taken. Water when taken makes pain worse, causing sour belching. Beer did not do it. At first had a feeling of weight in stomach like a flat iron lying there. Pain increased by walking around. Eating eases pain for three or four hours longer if lies down on back. Lying on abdomen sometimes eases it also. Often belching sour eructations, no vomiting, some nausea. No passage of blood by stools. Stools are brown; now and then stools colored, once black. Has lost thirty pounds in the last two years. Pain radiates to left, down and up; also some pain in back. Pain is easier in morning; begins about three and one-half or four hours after breakfast. When he lies on his belly gas rumbles and seems to pass and then he gets easier. The pain is gnawing, cutting or squeezing in character, seated just to left of middle line and just above umbilicus.

Examination. Man of a sallow complexion, thin hair slightly gray. He is thin, but muscular. In fair nourishment. Has a number of multiple lipomata over body—right arm most, one over abdomen. Thinks due to a lifting. Abdomen irregular, nodular on surface. By palpation liver is found two and a half inches below normal position. By pressure on right side of abdomen a slight bulging appears on left side and stomach wall feels thin. When stomach is distended with air a palpable mass is found at pylorus. The lower border of stomach is found below umbilicus and upper border or line of tympany is but little lower than normal. Twelve ounces of very acid material taken six hours after a light breakfast and four ounces after fasting all night. Free acid. Urine 1020, no albumen, no sugar.

Diagnosis. Imperfect drainage of the stomach, probably with ulcer. Drs. Lucas, Vance and Wallace concurring. Operation Oct. 24, 1906. Chloroform (Dr. VanZant); Lee Kahn and Wallace assisting. C. Weidner, Tom Wallace and Carl Weidner, Jr., present. Resection of one-third of stomach and post gastroenterostomy. Used Pagenstecher linen.

On Oct. 25th, temperature normal, pulse 62—later 66, at 5 P. M. 54. Regurgitation of blood stained fluid at intervals.

Oct. 26th, temperature 99, pulse 48, full and strong bloody fluid still being regurgitated; ice

had helped it some, gave five minims of 1-1000 solution adrenalin; at 12 o'clock no blood, but slightly greenish fluid (intestinal) came up, and patient feels better. Enemata of saline O I, and panopepton have been given three times a day from first.

Oct. 29th, patient has been sitting up in bed on head rest for three or four days; temperature 99.5, pulse 60. Feeding him butter milk, broth and bacon. Regurgitates some bile—not much in quantity.

Operation. Median incision in epigastrium. An indurated area about two and one-half inches in diameter was found in the wall of the stomach on the lesser curve one-inch from the pyloric extremity. The glands in the lesser omentum were enlarged. This enlargement with the induration of the wall decided us for a partial gastrectomy instead of depending upon a simple gastroenterostomy as a means of relief. The operation was completed in a short time, Pagenstecher yard being used for suture. The result in this case shows that it would have been better to use catgut for suturing mucosa as after the wound had completely healed a small abscess formed and a sinus persisted for some time due I think to the contamination of one of the sutures. Other than this the patient made a good recovery. At times since his recovery he has complained of a belching or regurgitation of bitter fluid from the stomach. He gained markedly in flesh, at one time weighing 152 pounds. Later he lost some of this flesh.

The ulcer is a quite typical round ulcer—just large enough to admit the tip of the index finger, in fact fitting smoothly over the rounded finger tip. Examination of the specimen by Dr. Hays shows the condition to be benign. No evidence of carcinomatous change being noted. This case seemed to be clearly one for surgical interference, and the patient, while suffering some discomfort since the operation, has been greatly benefited.

C. C. Lucas: This specimen was obtained from a man twenty-eight years of age who had been shown to a couple of medical societies in the city. I saw him first September a year ago. He had been vomiting for eleven months at times. I emptied the stomach three days after I saw him and he had an attack of tetany. After leaving the office he fell on the street and was taken home in the ambulance. I. Abell saw him with me and he had a slight attack of tetany following the emptying of the stomach.

The operation was done at the Negro Hospital on Shelby street. At the time of the operation he weighed ninety-one pounds and took the anesthetic badly. After the abdomen was opened this mass was found and numerous glands much enlarged. We were satisfied to do a gastroenterostomy and let the enlarged glands alone.

His temperature went to 95 and stayed there for three days. He vomited once after the operation and got along well. On the 5th of April—six months after the operation—he weighed 170 pounds. He got along well until the middle of June—he had been doing well and had kept his weight quite well. About the middle of June he began drinking foreshot high balls with another negro working in the revenue service and in three weeks' time from the beginning of the drinking of the highballs he died. In the meanwhile this mass had grown very rapidly and could be seen with every movement of respiration. We had no trouble in getting a post-mortem and I. Abell removed the entire specimen. We found that although the gastroenterostomy at the time it was done gave plenty of room for the escape of the contents of the stomach, the stomach had contracted quite rapidly and gastroenteric opening had become involved in the growth. Dr. Hays pronounced the growth a carcinoma. A posterior operation was done.

Robert Wallace: I was not in charge of the case, but my father was, and I am only here to represent him. I did not see the case before operation so I know nothing of importance at all. Lee Kahn could tell more about the case than I because he assisted in the operation.

Discussion of A. M. Cartledge's Essay, "The Doctor as a Business Man."

L. S. McMurtry: I am sure that I shall be willing to waive my speech in favor of Dr. Kelley for I know that he is better qualified to speak on the subject than I am. The fact is, gentlemen of the society, that I have been at a great loss to know by what process of reasoning they selected A. M. Cartledge to read a paper on this subject and me to lead the discussion because I am satisfied that neither of us know anything about the subject and we have pretty well demonstrated it. I will say that the last point that A. M. Cartledge made about the importance of collecting bills rather impresses me that he has gotten entirely off the subject.

Begging the pardon and the indulgence of the ladies present I wish to tell the story of a gentleman who advertised in the paper that he had a receipt by which any man could easily make a fortune. When I was in college my room mate read the advertisement in the paper that if he would send two dollars to a man in New Bedford, Mass., that gentleman would send him a receipt whereby he could make a fortune. He sent the two dollars in and in due course of mail there came back a full sheet of paper and in the center was written, "Work like hell and spend nothing." My experience has strengthened me in the belief that this after all is the

best way for a doctor to make himself independent.

I think, gentlemen of the society, that it is proper and appropriate that we should discuss subjects like this. There is as A. M. Cartledge remarked, a tendency in current literature to discuss subjects like "The Doctor's Relation to Business", and also "The Necessity of the Doctor Taking Part in the Political Affairs of the Country".

In regard to this particular subject and speaking seriously, I think the position of the doctor is a peculiar one. There is a good deal about a medical life that is individual and distinct from any other profession. For example A. M. Cartledge called attention to the fact that doctors as a rule are always poor business men. I believe that is true. The lawyer has a good opportunity to learn of business. He settles up estates, handles money, collects money as a part of his business. There is nothing whatever in the doctor's life that has to do with money except the collecting of fees. There is nothing in his business that has to do with financial affairs. Therefore, I say the doctor's relation to business is a peculiar one. The danger of the doctor engaging in speculative work is that he cannot keep up with it. Other men engaged in the speculations with him with whom he is fighting and contending have the time to devote to this. They know what is going on. The doctor visits his patients away from the marts of business where he does not know what is going on and learns about it later to a disadvantage.

Now, as to the excellent suggestion that has been made by the essayist, I think it will present many difficulties to the doctors. In the first place the doctor is compelled to do a great deal of work for nothing and he is compelled to do his work for which he is paid in a different way from any other business man. A great deal of it is the fault of the medical profession—the manner in which they have shrunk from injecting the financial question into their business. This has been a mistake by the profession. The doctor stands back and does not say anything about his fee and a large element of the laity think that it is not only his duty to wait on them for nothing, but if they call a doctor and he does not choose to go he has committed an offense and ought to be amenable to the law for it. I say that a doctor is called for example, to somebody to-night. He goes. If a case of typhoid fever, a broken leg or any ordinary thing he cannot say anything at all; he cannot ask, "Can you pay me?" He cannot investigate. He renders his service without contract, without any security. The same people cannot buy clothes that way. They cannot get any of the necessities of life in that way. The doctor's position is a peculiar one in that he has to give his services and take

the chances of the ability of the people to pay and he is put in an attitude where he cannot force these people to pay because he will be subjected to criticism by doing so.

As to the investment of money and the doctor in business, there are two sides to that question. I have never seen a physician who went into the business part of life that did not eventually neglect the scientific side of his profession. I have never seen a doctor that got intensely interested in money making that he did not neglect the scientific side of his work. It may seem a paradox, but the best way for a doctor to make money is not to be really after money. If he will apply himself assiduously to the scientific part of his professional work he will be in a better position to make money than if actively interested in making it.

I think the ideal way for the doctor is to practice economy and invest his savings in real estate. The practice of economy is something that I have not been able to do. I know a doctor in this room that could take half the income that I get in a year and he would have five times as much money as I have and live just as well as I do. I do not know how he does it. He can do it. It is the capacity for managing money, for reducing current expenses that enables a man to save money; then the doctor should judiciously invest it in real estate and go on with his professional work. That is the way for the doctor to protect himself and his family. Early in his career he should invest in life insurance.

C. W. Kelley: I do not see why I should be called upon to discuss this paper. There is no man in the world that has had more difficulties financially than I. Not only once but frequently.

The paper read was full of meat but the writer made some suggestions that he failed to consider properly. He advised that the money made should be entrusted to trust companies to invest in bonds. These bonds are taxed 260 and you pay over par for the bond. Your money invested in government bonds yields very little income. You take a city bond and you do not pay any tax. It pays four per cent. I do not like the bond investment at all.

The great system of business is to live economically and only buy what you can pay for. Never go in debt because 6 per cent. interest will undermine you and destroy you. If you have money protect the principle and get interest on it. In a city like Louisville an investment in property is better than an investment in bonds. From First street to Fifth street and from Market to Broadway will pay 7 per cent. on the investment. This property will double in a few years. On Fourth street property is high

and will go higher. The demand for property is great.

So far as the doctor's business is concerned, in the first place he must get the money, he must save and then he must invest that money. I know doctors who have come here and have never made over twenty-five hundred dollars a year and they are independent. They all done this by investing in property. I would say to the young men to invest in the humblest property you can buy. That will pay you fifteen per cent. on the investment.

Stocks I am afraid of. They may be watered. A panic comes as in '93 and puts you out of business. I would advise all young doctors who have a little money to invest it in real estate and the way to make money is by investment. I do not care how much money you make the first thing you know you will be wrecked financially.

L. S. McMurtry and A. M. Cartledge struck the key note when they said that economy is the center pin in the life of the physician. If he makes one thousand dollars a year he should save five hundred; if he makes fifteen hundred dollars a year he should save one thousand. His practice will grow and pretty soon he will have from two thousand to twenty-five hundred a year; let him invest this in humble property which will net ten per cent. and in a short time he will be independent.

I have had bonds and I have had stocks and I have been shipwrecked. I lost twenty-five thousand in a gold mine. I have invested in silver mines and in coal mines. I have been in the live stock business. I am about fifteen thousand dollars shy on horses. If you young men in the profession expect in the afternoon of life to have money you must invest properly. This makes money. When I first came here if I had gone south of the city and invested my money in unincumbered property I would have been worth a million dollars to-day. Gentlemen, if there is anybody in the world that is imposed upon by the faker it is the physician. I think I get three or four letters every week from mining companies.

My advice to the young doctor to-night if he should come to me and ask me how I would manage my affairs so that I might accumulate money and be independent in the afternoon of life would be to leave off gambling; do not buy anything without paying cash; if you have anything left after your legitimate expenses invest that in real estate. If you do that in twenty years you will be independent. Do not invest in bonds nor in stocks. I would advise you to put your money in real estate. Do not know anything about bonds; do not know anything about stocks, and gentlemen, another thing, keep away from gambling. It is the curse of the profession. Practice rigid economy. Let the peo-

ple know that you are going to be paid for your services. Have no charity list. Have it understood when they come to your office that you are expected to be paid for your services. I think by these methods the physician who is successful in the practice of medicine ought at the age of 55 be independent. I mean if you invest in property about the city.

I have invested in coal mines, mercury mines, lead mines, gold mines and I have invested in gas and oil but I did not strike either. I have been in the horse business and I have been in the tobacco business and I bought goats once, gentlemen, Cashmere goats. I have been along these lines and I am familiar with them, but when I got the money and paid the interest on it it took it all. Interest will destroy you.

J. W. Blanton: After hearing from the opulent members of the profession I suppose you wanted to hear from the other extreme—the poor doctor. The general practitioner gets little for his services. I have my peculiar ideas about money which I will not exhibit before this association of physicians who will not agree with me. I am a good deal like the Scotch iron master who does not want to die rich. I think we should spend our money while living. There is something else in the medical profession better than money. I think if we ameliorate the suffering of humanity, if we invest in this it will bring larger remuneration than the bonds that Dr. Kelly and Dr. Cartledge talked about. I have no desire to die rich. I have educated two children and I often say to the little red headed woman, who thirty years ago joined her life with mine that when we have accomplished that we have done our duty here.

I believe that the first thing that any man should do is to take out a life insurance policy; take it out in an old line company whose promise to pay is as good as any bond, then if he dies he knows that something is left to the wife who has confided in him.

I believe as L. S. McMurtry said that the doctor who is too much interested in accumulating dollars and cents is not a physician in the true sense of the word. He should "lay up treasures where the moth doth not corrupt, and the thief doth not break through and steal." I believe that the doctor should be conscientious in the practice of medicine, and should not let the thought of dollars and cents warp his conscience. I am frequently called five miles to see a patient in the country and I get a dollar and a half for the trip. It does me more good, I believe, than the one hundred and fifty dollar fee that Dr. Cartledge gets because I know what it represents to the patient in work, as shown by his appreciation. The riches of the profession are not in dollars and cents but in the good that is done in the relief of suffering.

Wm. Bailey: I think the arrangement is after listening to some of the more successful men to hear from those who have not been so successful. There is something based on my experience than leads to success that the others have not mentioned and that is becoming a professor in one of the medical colleges in the city. I want to say that I assisted in the organization of one of the best institutions in the city in the active part of my life and gave it my attention for fifteen years and got two hundred dollars out of it. I might say that a little later I invested in a modest way in a school on Broadway and I am very well satisfied with the investment.

I might allude to another feature that has already been mentioned. When I came to Louisville during the Civil War in 1863 I brought four thousand dollars with me that I had inherited, not made and I concluded to make an investment. This is the result of that. After twenty years I got two hundred and fifty dollars out of it having had the expense all the time.

Now I want to say that economy is the thing for the doctor to practice as has already been mentioned. There is nothing that pays him better. My experience has been getting into debt and losing all I had.

I came here during the war. The first year I came here there were ten thousand people here—hangers-on of the army, this being the center of the distribution of goods sent to the army. These people would just as soon employ one doctor as another. I made my expenses the first year—about twenty-five hundred dollars. The second year—excuse this personal reference—I made twenty-eight hundred dollars; the expense took it all. In 1866 the ten thousand people from whom I was getting money left the city and that year I made eight hundred dollars and my expense was three thousand dollars.

That went on until I was ten thousand dollars in debt and was paying ten per cent. interest on that. By rigid economy every dollar of that debt with the ten per cent. interest was paid and when I got out of debt I thought I was very rich. I found this to be the essential point, to bring my expenses as low down as possible. My wife and three children and myself dressed on one hundred and twenty-five dollars for one year.

I had become so accustomed to debt that I did not feel natural when I got out of it, consequently it has been my purpose to keep in debt having some place to put my money. This practice of economy has become a habit with me. with a much more moderate practice than many of my friends claim to have, I have after these thirty years saved enough for my old age and my family.

A. M. Cartledge: I have nothing to add to what has been said. I have been impressed with the fact that doctors waste a great deal of money. I wish to warn you doctors against "wildcat" mining schemes. I believe that real estate and bonds are the only things that the doctor ought to invest his money in. I am partial to bonds. My experience in real estate has not been like that of Dr. Kelly's.

Exhibition of Pathological Specimens.

Louis Frank: I have here three biliary calculi that I want to exhibit, referring briefly to the notes of the cases. And if I may be permitted I want to show another specimen. I present these specimens because they are not the usual class of calculi seen in probably two respects, first, that these calculi found in the gall bladder were single which is usually not the rule as we most frequently find more than one calculus. Another reason for presenting the specimens is their unusual size. All three of the cases gave the usual run of symptoms.

The first specimen was removed from a lady some two or three months ago. She had been treated for quite a while for digestive disorders and pelvic diseases. The exploration of the gall bladder was carried out after an operation in the median line on the pelvic organs. A cholesterol stone was found and removed. The patient recovered and the sinus closed on the seventh or eighth day and the patient went home from the infirmary at the end of three weeks' time.

The other specimen is one removed from a gentleman of 59 years who has been treated for some eight or nine years for indigestion. His stomach had been washed out and various remedies for indigestion had been given him. He was seen in consultation with Dr. Windell a diagnosis of gall stones having been made by the doctor. We could feel an enlargement of the gall bladder. An operation was advised and was done on the 17th of November. The gall bladder was buried under the colon and the omentum was thickened. After separating the intestinal adhesions the gall bladder was easily isolated and this large stone weighing 220 grains was removed. The gall bladder was contracted around it tightly. We found it impossible to remove it with the scoop and we had to split the gall bladder and turn it out. This is quite a large stone and this patient made a nice recovery.

This specimen here was removed on the second of January of this year from a gentleman 73 years old who had been suffering for thirteen or fourteen years; he had an attack three or four years ago and was treated for appendicitis at which time he had a great deal of pain in the right iliac region so it was a question whether

it was the gall bladder or the appendix that was involved. On account of the age of this man and the long history of indigestion we thought it was the gall bladder.

The incision was made low and a large mass felt. The incision was extended in each direction and the gall bladder came up in the incision. His pulse and temperature were elevated. The operation was done during an attack of acute cholecystitis. This stone was easily removed from the gall bladder. This end of the stone was down in the cystic duct and this end toward the fundus of the gall bladder. I judge that this stone had been contracted on and there was some infection in the gall bladder. This patient was treated in the same manner as the other, the fistula closing on the tenth day. This stone weighed four hundred grains. It is the largest I have ever removed. It is the largest I have seen removed from the gall bladder.

I want to say a word as to the treatment of all these cases. It is nothing new. I want to call attention to this fact again. There is an advantage in not suturing the gall bladder to the abdominal wall. The best thing to do is to infold the peritoneum and draw the gall bladder around a large sized tube, fixing it in the gall bladder. It will drain freely and when we take out the drain the peritoneal surfaces will drop together, the gall bladder will drop back and a fistula will be avoided unless there is occlusion of the cystic duct when it is expected. But we avoid the fixation of the gall bladder in the abdominal incision and consequent traction upon it. If the gall bladder is closed in this way the sinus closes up more rapidly. I have treated some ten cases this way and in not one did the drainage persist longer than twelve days. The wound can be strapped and we have an incision that heals by first intention without any hernia. In two of the cases the gall bladder was dammed off. This last patient had at the time of the operation an interstitial nephritis. He has made a perfect recovery and is walking about the infirmary.

I want to show another specimen here briefly on account of the beauty of the specimen and because the subject I think is always of some interest. This specimen is that of an ectopic gestation which I removed yesterday, the symptoms of hemorrhage occurring forty-eight to sixty hours previously. We see how nature attempts to take care of these cases. The specimen shows a small fetus lying in the sac. This pregnancy had not lasted more than four or five weeks. This is the small sac about the size of an almond and here is the small fetus. An interesting point about this specimen is that this pregnancy occurred undoubtedly in the fimbriated extremity of the tube. This was the right tube so that the woman presented some symptoms of appendi-

citis. Here you see the rupture in the tube. The bleeding went on and the sac was extruded into the abdomen (tubal abortion with rupture), contraction took place and the bleeding ceased. There was no bleeding at the time of the operation, which was forty-eight or sixty hours after the rupture of the tube. Notwithstanding this the abdomen contained about a quart of blood and blood clots.

W. H. Wathen: All of the specimens presented by Dr. Frank are unusually interesting—the gall bladder cases because of the great size of the stones removed. We seldom see stones so large removed from the gall bladder. When they get that large they may ulcerate into the bowel.

I agree with Dr. Frank that in case of a contracted gall bladder it is always better to suture your tube in the gall bladder and allow it to drain without attempting to suture the gall bladder or the remains of the gall bladder to the abdominal wall, and we will nearly always have a successful result. In fact it is seldom in such cases that we can suture the gall bladder to the abdominal wall.

The case of ectopic gestation is interesting. I want to emphasize one point. Until recently we followed the teaching of Lawson Tait; we believed that all cases that ruptured into the abdominal cavity were fatal. We now know that they are seldom fatal. I have operated on relatively a larger number of cases than any other. I have treated over one hundred and I have seen but one patient die of hemorrhage. I have seen but one case die of sepsis a few days after the operation and one die of sepsis before the infection preceding the operation. The danger of immediate deaths from hemorrhage or secondary hemorrhage we see is very slight and the results of operative treatment, considering the magnitude of the trouble is probably the most successful we find in abdominal work.

Discussion of Case Presented by F.L.Koontz:—

Louis Frank: I want to congratulate Dr. Koontz upon his thorough appreciation of what the trouble was here in the abdomen. I think too often these cases are overlooked and not finding some mechanical cause as volvulus, intussusception or some inflammatory condition in the abdomen the abdomen is closed without attempting to relieve the condition.

Murphy called attention to this condition in an address before the Mississippi Valley Medical Association and spoke of the treatment of this condition.

I asked the doctor why he attached the appendix so close to the median line. He explains that it lessens the traction on and the twisting of the gut. I believe he will have to do another operation for the closure of this fistulous tract. We have an eversion of the mucous membrane

attached to the skin and it will never close unless it is done by operative means which, of course would be very simple and easy.

F. L. Koontz: The condition, I believe is one of adynamic ileus and is one of purely nervous origin either of central nervous origin or reflex. In either case the lack of control comes through the splanchnic nerves. It is a condition that I believe, as Dr. Frank suggested, is very frequently overlooked. I believe that the adynamic element in lots of cases is purely mechanical. If that element is overlooked the condition may persist and kill the patient. It is highly important for us to recognize that there are certain cases where we have an absence of mechanical obstruction and the presence of this adynamic obstruction, whether reflex or from some central organic lesion. I think it is important to recognize and I think if we recognize these cases we can cure them.

In regard to the closure of the appendix, as it was about to slough we removed as much of it as possible and cauterized the mucous membrane. It has closed so rapidly that I take a more optimistic view of it than Dr. Frank and believe it will close. If it does not I believe it will be a simple matter to dissect the mucous membrane down and put in a purse string suture and close it.

A Clinical Study of the Cardio-Vascular System, By W. F. Boggess.

It was suggested to me by our chairman of the Program Committee that I read a paper upon some phase of heart disease, and this title presented itself to me. It shall be my endeavor not to deal with the subject in a didactic way but in a rapid review attempt to bring out some of the clinical aspects as seen in every day practice.

First let us consider the valvular diseases of the heart. These cases, in the main, result from previous endocarditis, and that condition is as a rule resultant from rheumatism. However, it is not necessary to prove a history of rheumatism as the causative factor. Twenty per cent. of the cases of endocarditis follow in the wake of other diseases, such as typhoid, measles, pneumonia, in fact any form of infectious disease may be complicated by endo-carditis. Then too we must consider the defects of the valves which may cause heart murmurs, independent of any inflammation of the endo-cardium. Again in the very young, and it is at this period of life we find most of our rheumatic endo-carditis, the infection of rheumatism shows as great or a greater predilection for the serous as it does for the synovial membranes and a child may have rheumatic fever without showing any characteristic involvement of the joints and suffer from rheumatic endo-carditis and pericarditis.

The diagnosis of valvular diseases is as a rule quite easy. There comes sometimes, a question as to whether or not a murmur is organic or functional. The functional murmurs are the so-called hemic murmurs and are found only in patients that are marked anemic and hydremic.

You have no right to even suspect a murmur as functional in a subject whose blood approximates normal. When functional murmurs are present they are heard as a rule only at the pulmonary interspace at the base of the heart.

Where a valvular lesion is present you must ever remember that there are three stages to these cases.

(1) The stage of complete compensation, in which the patient appears to be as well as though he had no crippling of the valves. We have all seen persons with valvular heart disease who have lived the usual length of time in perfect health, due to the fact that compensation remained perfect.

(2) The stage of beginning failure of compensation. This is when the patient, even without knowing that he has cardiac disease, begins to find that he tires easily; that after slight exercise he pants and puffs, does not sleep well and, very frequently, the first symptom he will complain of and the one which takes him to the doctor is pain in the left shoulder and down the left arm. I have discovered valvular lesions in persons simply because they came to me and complained of pain of this character.

(3.) This stage is the stage of complete failure of compensation. This is the last stage. In the second stage, where failure of compensation is only threatened, we can do much towards patching the patient up and restoring compensation by close attention to diet, etc. So long as full compensation is maintained, although the lesion may be a large and even a serious one, the patient is as well as you or I. No general estimate as to duration of life can be made. Each case is an individual one and we have no data upon which to base a positive judgment.

There are other conditions which are more reliable as a basis of prognosis than the lesions themselves. First, the age of the applicant. A cardiac lesion in an extremely young person and in those over fifty years of age, is a very much more serious condition than it is in early adult life. In very young persons and those fifty years of age or over, it is much more difficult to obtain and retain compensation than it is in persons between the two extremes.

Another factor which enters largely into the prognosis is the sex of the patient. It is a well known fact that women with heart lesions live longer than the opposite sex. This may be explained partly by the fact that their occupations are usually less strenuous than those of men, thus putting less work upon the heart.

No matter how perfect compensation may be, we should always bear in mind the fact that an inter-current disease may considerably lessen the life of the applicant.

This is one of the conditions which makes la grippe such a fatal disease in some persons. A latent, thoroughly compensating heart lesion is whipped up into an active, non-compensating one. The same may be said of pneumonia.

The most favorable valvular lesions are those of aortic stenosis and mitral regurgitation. These patients may be patched up and compensation maintained for an indefinite period. Aortic insufficiency should be regarded as one of the graver forms of valvular disease. It is one of the types in which hypertrophy cannot be brought about sufficiently to overcome the constant leakage, dilatation occurring more rapidly than the hypertrophy can overcome.

A few words as to treatment. In the first period no medical treatment is required. The individual should lead a quiet life, free from excitement and worry. The strenuous times in which we live, our present methods and modes of living are not under any conditions conducive to longevity, certainly not in these cases. This should be the cardinal rule: exercise without fatigue, amusement and recreation without excitement, nutrition without over stimulation. In this stage no patient should be notified of his heart condition by his medical advisor, for the knowledge of it with the dread and feeling of utter hopelessness of these troubles by the laity, unnerves the individual and hence destroys nerve tone.

When the second stage, that of beginning failure of compensation appears, the patient should now be made to understand his exact condition and the dangers which attend it. He should be told of the serious effects of sudden physical strain, or emotional excitement, over indulgence in eating or drinking, or sexual excess, that any of these may produce cardiac dilatation or insufficiency which will never be recovered from. A quiet life with the most perfect nutrition and the least tax on the digestive organs is desired. Absolute rest in the bed, mercurial and saline purges and small doses of digitalis until compensation is again resored. The use of digitalis at this period requires the greatest care. I wish to emphasize this fact, that harm is often done by giving more digitalis than is required. When failure of compensation is established or indicated by dilatation of heart cavities and feebleness of heart walls, the time for active interference is at hand. Let me state most emphatically that here are cases that require sounder judgment and more experience than almost any other class of cases. Each case and each individual must be studied by itself. Absolute rest in bed, restricted diet, attention to skin and bowels, massage, hydro-therapy

are absolutely essential in all cases. In all the types of valvular disease, except possibly the aortic stenosis and great arterial sclerosis, digitalis and strophanthus are the remedies most reliable. Yet the science in the treatment is in knowing when and how to give them. In aortic stenosis and other conditions associated with arterial sclerosis, and high tension pulse, digitalis should always be accompanied with nitro-glycerine. It is in the mitral diseases that we find the most remarkable results from digitalis. In the third stages of complete failure give it in large doses for its effects and after compensation is re-established give in smallest doses necessary to sustain compensation.

I shall only mention the subjects of myocarditis, acute and chronic, fatty heart, cardiac hypertrophy and chronic dilatation. All of these conditions are secondary. They should be studied with the underlying and causative disease.

There is one other condition of the heart, however, that I should like to dwell upon a little more extensively. It is not sufficiently emphasized yet sufficiently common and severe to demand special attention, namely: acute dilatation, not dependent upon or secondary to any other disease. The degree of dilatation in a beginning case depends upon the suddenness in which the intra-cardiac pressure is increased and the condition of the myocardium. The heart muscles suffer, somewhat, in proportion to the other muscles of the body. Any condition of malnutrition, lack of nerve tone, lack of proper physical exercise that renders the general muscular system weak and atonic effects likewise the myocardium. A disturbance of the nervous system not alone renders the heart muscle atonic, but destroys that nervous communication which exists between the heart and blood vessels to the effect that when the heart action becomes labored, the arteries dilate and the peripheral resistiveness is diminished and sudden increase of blood pressure induced by severe muscular exertion, such as heavy lifting, difficult athletic feats requiring strength and endurance, serious if persisted in and serious dilatation of the heart is liable to follow. This is the cause of so many athletics having to give up their occupation. It is singular, and yet a fact that those forms of exertion which necessitate the excessive use of the muscles of the legs are followed most quickly by embarrassment of the heart. Such exercise is much more serious for a man in the middle period of life than for a boy or a younger man. Even in boys and young men athletic sports requiring excessive use of the muscles of the leg should be entered into with caution, and tax of endurance should not be made without thorough previous training. The best type of acute dilatation we see is in the so-called athletic heart. Sudden deaths which sometimes occur when persons plunge into cold water

are explained by supposing that contraction of the small vessels arresting the tension in the aorta to such an extent that the heart is acutely dilated and is paralyzed in the attempt to force blood through contracted capillaries. Excessive dilatation during severe muscular effort results in heart strain. A man calls upon his heart for extra work he is seized with pain about the heart and a sense of distress in the epigastrium and he breathes rapidly for a time, is winded, as we say, and the symptoms pass off after a few hours or a night's quiet. An attempt to repeat the exercise is followed by another attack, or he may suffer from an attack of cardiac dyspnoea while at rest. For months he may be unfit for severe exercise or may be permanently incapacitated. He has overstrained his heart and has become broken-winded. The reserve force of his heart is lost. Acute dilatative heart weakness is seen in many conditions. The symptoms are, as a rule, preceded by the phenomenon which attend the physical exertion, quickened heart action and accelerated respiration. Breathlessness soon comes on and perhaps, what is called a "stitch in the left side." The chest seems bound down by a contracting band, a sense of oppression is felt over the precordial region, the individual becomes dizzy, nausea may or may not be present, the heart action is rapid, pulse small and feeble and it may be irregular or intermittent, and usually in striking contrast to the wide diffused cardiac impulse. In severe cases the skin assumes an ashy gray hue, lips purple, ideas confused, intellect clouded and often times they fall, perhaps, unconscious. All the above symptoms may last for a few hours or a few days, or on the other hand recovery may not take place for months or years. Examination of the heart reveals feeble and diffused impulse. The treatment of these cases is first to diminish the work of the heart as rapidly as possible. This must be met by absolute rest, free from mental excitement. When dilatation first occurs and heart action feeble or irregular, stimulants should be freely administered, and of these alcohol in full doses is probably best. In conjunction, amyl nitrite, nitro-glycerine and strychnine should be given.

Arterio-sclerosis.

The study of the changes which take place in the walls of the blood vessels is a study of ultimate processes of life. In the contemplation of these structures we are brought to face the problem of life itself. They are not only wall tubes for the protection of blood, but they have to do directly with the ultimate process of oxygenation, nutrition and metabolism. They are not to be looked upon as simple conduits for the circulation or as mere appendages to the heart. On the contrary, the heart is rather an appendix to the blood vessels, and in no condition is all this better demonstrated than in the disease of arterio-

sclerosis. A disease we have learned to recognize and to respect within the last two decades. It is the disease of all diseases that abbreviates life. While we recognize it as a somewhat physiological condition in the very aged, it becomes a pathological condition in every case and is sometimes very marked in a period as early as the age of thirty-five, and instead of saying that it is a disease of the aged, we might say that the individual reached advanced age because of the absence of arterio-sclerosis. The process is variously diffused in the body, and because arteriosclerosis is not felt and recognized in radial artery we have no right to say that our patient is not suffering from some of the other types of arterio-sclerosis. It is this hardening of the arteries of the internal organs that give us so many symptoms of diseased conditions explainable only on the theory of arterio-sclerosis.

The first effect of sclerosis shows itself in impairment of contractility, later of elasticity and osmosis, and interference with metabolism, then finally the failing nutrition, emaciation, and marasmus of this state. The rapidity of circulation and force of the heart's action stands in direct relation to the character of the tissue of the vessel walls. When the sclerosis is pronounced the vessel offers such resistance to circulation, and so little help to it, as to throw extra work upon the heart and lead to dilatation and hypertrophy. For us to have symptoms of arterio-sclerosis it is not necessary for us to recognize the condition by the coarse changes in the pulse, but by the use of the various instruments devised for this purpose. **Eye Symptoms:** We can detect and note the finer changes very much earlier. For continued persistent high tension is always evidence of beginning sclerosis. For arterio-sclerosis may be present in the internal vessels and latent in the body for a long time and the symptoms will depend upon the organ which is affected. The symptoms are dependent largely upon the organ most affected by the atheromatous changes whether of the aorta, the coronary arteries, kidney, brain, abdominal aorta, etc. Each of these conditions show characteristic symptoms. The general reduction of energy is one of the earlier symptoms. The individual learns or is soon taught to economize force. He finds that without any positive disease that he is losing flesh, strength, energy, and vim, digestive disturbances are common. Dyspnoea which shows itself only on exercise, the so-called dyspnoea of effort followed by palpitation and slight precordial anxiety, coldness of the extremities, sense of numbness, headache and vertigo is the line of symptoms most frequently seen when the patient first presents himself. Atheroma of the coronary arteries brings down the nutrition of the whole body and leads to a premature marasmus. Affection of the peripheral arteries can be first revealed by the

sense of parasthesia, formication, numbness, and cramps. The diagnosis of the arterio-sclerosis kidney is shown by the abundant clear urine and specific gravity, small amount of albumin. In certain cases the diagnosis may be reached only by exclusion as a gradually failing nutrition in the absence of any discoverable disease. Changes in disposition, impairment of mental faculties, paresis, point to affection of the brain. A diagnosis can sometimes be made from the attributable cause. It must be remembered that alcohol has especial predilection for the liver, gout for the vessels of the kidney, syphilis for the vessels of the brain, especially in the young. The prognoses depend not alone upon the seat and extent of the change, but also in a considerable degree, on the mode of life. So long as the brain and the heart and the kidneys show no positive sign of disease the prognosis is not unfavorable. Persistent failure of nutrition in spite of all efforts at relief makes prognosis grave. The melancholia of failing nutrition and atrophy is a bad sign. Sclerosis of the brain, of the heart and the kidneys, are irremediable affections, so far as perfect restoration is concerned, but even in these cases by proper care and treatment life can be prolonged and complications averted and the patient made comfortable. Now as to treatment of these sclerotic cases. In the earlier stages of this condition the treatment must have special reference to the mode of life and manner of living. They should be notified of their condition and the necessity of a thorough regime should be explained to the patients. Alcohol in every form should be absolutely omitted. The patient should be put upon the plainest possible diet. He should avoid all brain worry and excitement. The patient must put himself, if possible, in an atmosphere of cheerfulness, contentment and self-control. Here too the rule as outlined in the valvular heart disease, is exercise without fatigue, amusement without excitement, nutrition without stimulants is a cardinal one, but absolute change of scene, environment and climate is of importance. Wonderful results I have seen from sending these patients to Florida for the winter, where they lived an out-door life, free from excitement, and an abundance of fruit. The vegetable diet is the one to be suggested.

I wish here to utter a protest against the fashion of insisting on our patients drinking so much water and liquids. It is possible to do much more harm by the over distension of the heart and the increase of blood by taking too much liquid. It also interferes with the proper assimilation and metabolism. It is wonderful sometimes what you can do by strict attention to diet and hygiene alone. Theoretically the best remedy that we have at our command is the iodides which is often said to be the "medicine of the arteries." These should be given in small doses, five grains

three times a day, well diluted, before meals, and their use persisted in for months. If you have much kidney complication it is sometimes most desirable to give the tincture of iodine, arsenic in the form Fowler's solution, two or three drops after meals. Diuretics and laxatives are indicated when renal or hepatic insufficiency are presented. Strychnia or nux vomica are often necessary to support the heart. When the patient is unable to lie down and rest at night from attacks of dyspnea there is no remedy equal to small doses of morphine combined with atropine. In the severest attacks, even in the presence of oedema of the lungs, morphine is attended with only good results. Nitro-glycerine is another remedy of great value in advanced cases in sustaining and favoring osmosis and endosmosis. When there is marked dilatation of the heart it becomes sometimes necessary, notwithstanding the theoretical dangers from digitalis, that it be administered cautiously and is capable of doing great good. Attention must be paid to clothing. Warm underclothing should be worn, salt baths and attention to the skin, exercise in the open air are essentials that are oftentimes overlooked and should be insisted upon, for out-door life with moderate exercise tones the muscles and the heart favors oxygenation of the blood—favors metabolism and rejuvenation of all the tissues.

DISCUSSION.

C. H. Harris: Of course we could only expect an admirable exposition of this subject from a man like W. F. Boggess, because I know that W. F. Boggess was acquainted with this subject and have known it for sixteen years. It has been truly said that "a man is as old as his arteries," that the length of time a man lives in the world depends largely upon the condition of the blood vessels. Now, there may be two or three elements in that factor. In the first place the man may be made out of bad material. Again a man may use good material badly, or he may use bad material badly. If you have health, gentlemen, if you feel well and the functions of the body are carried on there is no interference with the heart and the accommodating powers of the blood vessels.

When the heart contracts—I remember how Dr. Kelley used to teach us and I am going to give you some of Kelley now—the heart says lubb; that means that the ventricles contract and that the blood is being forced out of the ventricles along with the impulse of the heart against the chest wall. Then comes a little interval and the heart says dubb, which means the closure of the semilunar valves. Then there comes a longer interval the period of repose. The period of work and repose is called a cardiac cycle. Let us say, then, that this cycle is divided into tenths. We know that the longest

sound is the first and the shortest sound the second. While the ventricles are contracting four-tenths of that time is used up, then the interval following occupies one-tenth of the time. In the closure of the semilunar valves three-tenths of this time is used up; the interval of repose following the second sound represents two-tenths. We then find the heart acting seven and resting three out of ten.

Now, whenever conditions exist in the body that interfere with the repose of the heart we are sure to have some disturbance of the cardiac mechanism.

Let us not forget, gentlemen, that we abuse ourselves greatly. I find that the body can be compared to a stove. We put fuel into a stove and the fire produces heat and energy. We put fuel into the body and the result is heat and energy. If we do not have a stove pipe the gas escapes into the room. Elimination of the waste products of the body takes place through the skin, kidneys and bowel. If the skin is inactive an increased amount of work is thrown on the kidneys and the kidney, like any other organ or anything else balks. What results? The retention in the body of excrementitious matter that should be eliminated. That has to do with the contraction of the vessels bringing out tension and throwing too much work on the heart. Now, what brings about this condition? In my case I can produce rheumatism in six or eight hours with a glass of beer, a piece of cheese and a cigar. I have repeatedly done this as a matter of experiment. A dose of aspirin relieves the whole business. I do not know whether it is the nicotine or the retention of poisonous products in the body that does it, but I can produce rheumatism from want of elimination of the proximal principles of the urine.

Now, do you know that four months ago I had seventeen convulsions in one day from the retention of the excrementitious products of the urine? What relieved me? Aspirin. About three years ago I had a condition that Professors Weidner and Marvin thought was a perinephritic abscess. Nothing did any good until I tried the salicylates. I am studying rheumatism. I can produce any kind you want to order at any time with the proper kind of food and tobacco.

Alcohol—good old Bourbon—is responsible for more trouble in this way than anything else with the exception of syphilis. When you take alcohol into the system it is absorbed and most of it goes directly to the liver through the gastric vein. Now you bathe the liver in alcohol and an inflammation of Glisson's capsule results as well as an inflammation of the liver cells, the blood is dammed back and ascites follows. The same thing happens to the kidney. You take alcohol and as it is eliminated it damages the eliminating organs. I think W. F. Boggess should have

emphasized syphilis more. When can we tell a patient that he is cured of syphilis? Gentlemen, as a matter of clinical experience I do not believe we can ever tell a man that he is cured of syphilis. Gentlemen, if a man once has syphilis he always has syphilis, no matter whether the primary lesion had been ever so slight or the secondary manifestations ever so mild. The patient congratulates himself that he has only a little touch of a case, but only too suddenly he has some of the tertiary lesions and who knows but that it may lead to angina pectoris or tabes dorsalis. We can never tell when the patient is free from syphilis. When I have a syphilitic patient I watch for arteriosclerosis. I never discharge him. I do not believe they ever get well. I have seen those cases treated for over four or five years and they come back with other manifestations. The iodide of potassium, gentlemen, simply cures syphilis by elimination. You never know how a man is going to tolerate the iodide of potash. Some patients take a few grains and others take a great many grains a day. We do not give it for syphilis only, we give it to eliminate many other things.

Now then, in the case of both you have constipation instead of the material being sewered out—because the bowel is only a sewer, a man dying of tuberculosis has a diarrhoea; a man with typhoid fever has a diarrhoea; nature flushes him out. The American people, being constipated all the time we cannot expect anything else than the bowel being out of commission. Not long ago I asked a young lady if she was constipated and she said no. She said her bowels moved day before yesterday, no she said it was last Saturday. Now that means, gentlemen, that fecal matter accumulates in the bowel. We absorb material that should be eliminated, then we get skin, kidney & Co. out of order and if we would keep the emunctories open we must keep the bowel, skin, kidney & Co. open. Putting into our bodies things that we cannot digest, tobacco, alcohol, etc., are some of the causes of arteriosclerosis.

Chas. Moir: I am going to take up only a little time. I wish to refer to two points. The paper was a very excellent one and I would not have missed hearing it for anything in the world. One point I wish to speak of is that W. F. Boggess says that these diseases of the heart are not at all hard to recognize. I want to cite one case in practice where I made a diagnosis—not to the patient, but to her husband—of endocardial trouble. She had been under my care for four or five years. Every time I examined this heart I found an organic murmur. She is the wife of one of the city officials. She had been married eleven years and finally became pregnant. During the first six months of her pregnancy I had examined her several times and

found the murmur present every time I examined her. I worried and feared the termination of this labor case, being engaged to wait on her. In the meantime I had her examined by some of the leading men of the city—one of them the late Dr. Ouchterlony. He agreed with me that the trouble was an endocardial one. Every man who examined her agreed. Two months before the termination of the pregnancy the murmur disappeared and has never been present since. The child is two and a half years of age. I had R. L. Ireland give her an anaesthetic recently and Irvin Abell removed the appendix. The murmur must not have been an organic one, but it was diagnosed as an organic murmur by some of the best men in Louisville.

Another point in the paper, the so-called attacks of acute indigestion being acute dilatation. I want to speak of an experience I had last summer. I was going up the Chesapeake to Washington. I was taken with an attack of what I thought was pneumonia. I could get my breath with great difficulty and my pulse was 160. I called the purser about 9 o'clock and asked him if there was a physician aboard. He said he did not know as the steamers did not carry regular surgeons. He came back and said that there was no physician registered but myself. I asked him what time we would get to Washington and he said at 7 o'clock in the morning. I replied that I would be dead. The next morning when we arrived at Washington an ambulance was called and I was taken to the hospital. My trouble was diagnosed by one doctor as acute indigestion and by another as acute dilatation of the heart. I have had my heart examined by a great many physicians, among them the great Janeway, and some say acute indigestion and some say acute dilatation. Like Dr. Harris I can produce an attack of acute indigestion in ten minutes.

So all of these diseases of the heart are not so easily diagnosed. R. L. Ireland knows the case I cited and I suppose he did not find an organic lesion of the heart or he would not have given her an anaesthetic. A diagnosis of organic heart disease was made by some of the best physicians of the city.

W. H. Wathen: I would like to ask R. L. Ireland if he considers an organic lesion of the heart a contraindication to the giving of an anaesthetic.

R. L. Ireland: In my experience in administering anaesthetics which now covers more than five thousand cases, I have given anaesthetics to persons with every form of organic heart lesion, and if a case were an emergency there is almost no heart lesion that I would hesitate or refrain from giving an anaesthetic to the possessor. Of course we must understand that there is an added risk where we have organic heart lesions or have arteriosclerosis. The least dangerous heart

lesion is perhaps mitral regurgitation with good compensation.

M. Casper: I usually suffer from indigestion and headache after attending these meetings. I have wondered whether it was caused by the absorption of the tobacco smoke or the beer. I think that this society is one of preventive medicine and we ought to appoint a committee to investigate this thing.

This is an interesting paper and I do not think there is any one here who has not gained something from it. If there is anything in which there is a divergence of opinion it is in cardiac diseases. If there is any subject upon which physicians are ignorant it is the heart. I had a surgeon tell me a few days ago that he could not tell an organic heart murmur. He had not paid much attention to it and I believe there are a great many in the same class. W. F. Boggess should be congratulated for bringing this subject before the society and I think we all in the main agree with him. There is one point upon which I do not agree with him quite, that is as to informing the patient of his condition. I believe it is a good thing for a patient to know his condition immediately. I think that is one reason why patients live long lives because they take more care of themselves as to diet and exercise and they live longer than they otherwise would. They live the simple life and do not contract pneumonia and gripe and other preventable diseases that would be apt to carry them away. It is important for these patients to know their condition so that they can exercise this care.

As to the treatment of the various heart conditions, I believe that digitalis is the best and most important drug in the treatment of cardiac disease. It has a good many contraindications. It has almost as many contraindications as indications and in diseases in which it is contraindicated it is positively harmful and it is often given without knowledge or reason for giving it.

Another drug that is used in heart diseases is nitroglycerine. Its use is very often abused in these cases. Many physicians give the drug with the idea that it is a heart stimulant. It is not in the manner that digitalis is. Nitroglycerine lowers blood pressure. I think that digitalis is often given for too long a time. After the symptoms are relieved, after compensation is established we should cease giving digitalis. Another drug that should be used in these cases is strychnine. I make a practice of giving digitalis until the symptoms are relieved and then continue strychnine at intervals. It is a great heart regulator and it has no accumulative effect, nor does it disturb the stomach or overtax the heart. So long as we have compensation in any heart lesion I do not believe that digitalis is going to be of any value.

W. S. Ehrich: Speaking of the use of nitroglycerine I once had a patient under my care upon whom I experimented a little with this drug. I increased the drug 1-100 of a grain at a dose and at the end of 2 months the patient took one grain at a dose. This was at once reduced. I have never heard of a patient being given this amount of the drug, and I thought it interesting to state that this much can be given by gradually increasing the dose. The patient suffered from headaches at times and at these times it would be decreased to 1-2 the amount and increased as before. Another thing that interested me was a case of uremia that I saw treated in which, without its previous use 1-10 of a grain was given and repeated at short intervals.

Louis Frank: Before W. F. Boggess closes the discussion I would like to ask a question concerning the therapeutics of heart conditions. The subject came to me in a practical way very recently in a case in which the patient, during the administration of an anaesthetic became desperately ill on account of the heart's action. We finally concluded, and I believe properly that it was a case of acute dilatation. The pulse was so rapid that it could not be counted. I ran up to 176 or 180. This patient was in a desperate condition for three or four hours and was quite ill for several days after. The question was what was best to give in such cases of acute dilatation. This patient had a goitre; she had a distinct ophthalmos. What should we do with this patient? We did not feel sure that digitalis was a good thing to give. The physician present in the case wanted to give digitalis. Then normal saline was suggested which struck us as being a bad thing. Then we did venesection, but were unable to get much blood away, and we also applied the ice bag. After twenty-four hours the patient began to improve, but the pulse continued rapid and for five or six days she complained of precordial distress, and now two and a half weeks after the anaesthetic was administered this patient is apparently alright except some interference with the circulation in the right foot.

I would like to ask W. F. Boggess what to do in these cases. These cases are rare in the practice of surgery, but they confront us occasionally, and in these cases with alarming symptoms we want to know what is the best thing to do.

I heard M. Casper say something about arterial tension. I do not think we can tell much about the tension by the finger. I think the only way we can get at it is by instruments of precision, and we have here to-night a gentleman who has done a good deal of work along this line and I would like to hear from him in regard to the use of the sphygmometer in determining blood pressure.

W. F. Boggess: I had hoped that Dr. Thompson would bring his instruments to-night and show us what could be done by instrumentation. I tried to impress upon my hearers that by the use of special instruments in determining the tension and so on and by the use of the ophthalmoscope we can discover arterial changes that are of importance in diagnosing as well as in treating these cases. The purpose of the paper was simply to run over the handling of these cases in a clinical way. I did not expect nor attempt to offer anything new. I tried to make plain in the paper the abuse of digitalis and that it was possible to abuse this drug and that to know just when and how to use it required knowledge and experience. I think we have departed from the idea of the paper when we can determine the individual's susceptibility to its effects. In regard to the case that Dr. Frank mentions, it must have been one of acute dilatation because that is frequently a cause of death after anaesthetics. It is recognized as a cause of death and he is to be congratulated that his patient is alive. In a case of this kind digitalis is not necessary and I doubt whether it should be used. Nitroglycerine to open up the peripheral capillaries, and in this way relieve the intracardial pressure, should be used. I think alcohol in large doses is the drug to be used in a condition like this. After surgical operations if there is vomiting it cannot be given by the mouth and it should be given by the rectum or hypodermically. An ice bag to the precordium is another important thing. It is simply a lack of nerve tonic and alcohol and ice to the precordium and absolute rest relieve the patient. I believe venesection would have done good. I think nitroglycerine in these cases would bleed them into their own veins. I think the saline solution contraindicated. With regard to nitroglycerine, I want to say that most experimenters have shown that we have never given it in sufficiently large dose nor sufficiently often. Its effect is evanescent; its effects quickly pass off and we do not get the effect longer than two hours, and I believe as Dr. Ehrich said we can run up the dose high without doing harm except producing headache. On the other hand we find patients who are susceptible to nitroglycerine and a small dose will produce headache. We should never give it in doses of less than 1-50 or a grain to get any effect. I believe that to get good results we should give 1-50 of a grain and give it every two hours. Digitalis or strychnine should be given every four to six hours. Nitroglycerine should be given three times as often. This is a point that is frequently overlooked.

As far as informing the patient is concerned, I differ from M. Casper materially. There is no need of doing anything except living normally if there is complete compensation. The patient

needs no treatment; he needs no medical supervision. As a rule we have the necessary warning to notify the patient and begin treatment. You have plenty of warning of the second stage. The patient has shortness of breath after running for a street car or hurrying up steps. He wakes up at night with a feeling of oppression which is perhaps the first symptom of failing compensation. When he reaches the second stage we should inform the patient.

La Rue.—The LaRue County Medical Society held its last meeting in the office of J. W. Thomas, April 18th, 1907. The following doctors were present:—J. C. Jones and L. Wyatt, of Buffalo; D. W. Gaddie, W. E. Rodman, and Thos. J. Poteet, of Hodgenville, and Leigh Maupin, of Magnolia. The meeting, being a called one, no program was had. Officers were elected for the following year, as follows:—J. C. Jones, Buffalo, president; Thos. J. Poteet, Hodgenville, secretary (re-elected); W. E. Rodman, Hodgenville, vice-president. L. Wyatt was received as a member of the society. On motion of W. E. Rodman, the society unanimously requested A. T. McCormack, he being an honorary member of the LaRue County Medical Society, to be present at our next regular meeting, the third Thursday in July, and give the society a talk along any line he may wish to discuss. There being no other business the society adjourned to meet the third Thursday in July. THOS. J. POTEET, Secretary.

Morgan.—The Morgan County Medical Society met at the Cox Hotel, West Liberty, Ky., on July 22, 1907. Members present, W. G. Carter, B. F. and L. D. Carter, W. L. Gevedon, W. F. Wheeler, H. V. Nickell, B. F. Nickell, Edgar Nickell, and B. F. McClure. The house was called to order by B. F. Carter. I. A. Shirley, of Winchester delivered a very able and enthusiastic address for the good of the society and the gigantic march and progress of the medical profession. Seven of our members paid their dues. Our next meeting will be at the same place, August 26, 1907. The small-pox epidemic has abated, as all who were exposed were successfully vaccinated. On motion H. V. Nickell was appointed delegate to the Kentucky Medical Association October, 1907, at Louisville. B. F. McCLURE, Secretary.

Muldraugh.—The Muldraugh Hill Medical Society convened in the City Hall at Elizabethtown, Thursday, August 8th., and was called to order by the president, D. W. Gaddie, of Hodgenville, at 10 o'clock. Minutes of the April meeting were read and adopted.

G. C. Hall and A. D. Wilmoth exhibited specimens and reported two interesting cases, to-wit:

calculus of sub-maxillary gland and sub-mucous fibroid of uterus respectively.

S. H. Ridgway, of Shepherdsville read a paper entitled "The Common Gastro-Intestinal Diseases of Infancy and Childhood."

Discussions by Hugh D. Rodman, B. M. Taylor, C. Z. Aud, H. Lucien Heizer, G. G. Thornton, F. P. Strickler, and by Dr. Ridgway in closing.

Adjourned for dinner.

Society called to order at 1 o'clock by the President.

Election of Officers.

Basil M. Taylor of Greensburg, was elected President. A vice president from each county was elected as follows: J. L. Atkinson, Taylor county; C. B. Kobert, Marion county; Hugh D. Rodman, Nelson county; T. J. Poteet, LaRue county; H. C. Duvall, Grayson county; J. J. Adams, Hart county; W. H. Strother, Hardin county; D. R. Walker, Meade county; Jno. E. Kincheloe, Breckinridge county; S. H. Ridgway, Bullitt county, and A. D. Willmoth, Jefferson county.

H. R. Nusz, of Cecilian, was elected secretary to serve permanently. H. Lucien Heizer invited the society to attend a meeting at New Haven, September 11th.

A. O. Pfingst, of Louisville, read a paper entitled "Some Complications of La Grippe as we see it in Eye, Nose and Throat Practice." Discussion by J. W. O'Connor, G. C. Hall and by A. O. Pfingst in closing.

R. C. McChord, of Lebanon, exhibited a very interesting case and read a paper on "Conservative Railroad Surgery" Discussions by D. C. Bowen, A. D. Willmoth, C. Z. Aud, F. P. Strickler, H. C. Duvall and McChord in closing.

Jno. R. Wathen, of Louisville, exhibited specimen and read a paper entitled, "The Surgical Treatment of Goitre." Discussions by H. Lucien Heizer, S. H. Ridgway, D. W. Gaddie, R. C. McChord, Hugh D. Rodman, A. D. Willmoth and by J. R. Wathen in closing.

Adjourned to meet at Elizabethtown, Thursday, December 12th, 1907.

H. R. NUSZ, Secretary.

Nelson.—We regret to announce to you that M. Earl King has removed from Cox's Creek, Nelson county, to 2213 W. Broadway, Louisville, where he will continue to practice his profession. By the removal of M. E. King the Nelson County Medical Society has lost one of its brightest members and the Cox's Creek community one of its best citizens. Success go with you.

HUGH D. RODMAN,
Secretary.

Oldham.—The Oldham County Medical Society met Thursday, June 27th, at 11 A. M., at the residence of Lew G. Wallace, Beard; John H.

Speer presiding. Those members in attendance were:—J. H. Speer, Freeman, Wallace, Hart-hill and Caldwell. The society had as its guest Argus D. Willmoth, of Louisville. John H. Speer reported a clinical case of tetanus which was very generally discussed. John A. Freeman reported a most interesting case of dislocation of the elbow joint. Argus D. Willmoth described a case of typical nervous temperature which, because of the peculiar circumstances and speedy recovery seemed to fully justify the diagnosis.

After a hearty dinner Lew G. Wallace read a most instructive paper on the advantages of having operations performed at home instead of in hospitals as most commonly followed at the present time. He very well brought out the points to be gained by the physician and the patient, and clearly showed how almost any room could, in a very few hours be prepared to conduct an operation therein. This paper brought out considerable discussion and it was generally agreed that from the viewpoint of the country doctor this would be a most acceptable change. It would certainly make the surgeon's task more difficult, as he would have to personally superintend the sterilization of bandages, instruments, etc., but even this might be turned to his advantage. The meeting adjourned to meet July 25th, at LaGrange.

HERBERT CALDWELL, Secretary.

Pulaski—The June meeting of the Pulaski County Medical Society was one full of interest and enthusiastic participation upon the part of all present. The president, B. G. Allen, called the society to order with the following members present: A. W. Cain, I. S. Warren, T. R. Griffin, T. S. Kennedy, F. A. Taylor, H. C. Dye, J. M. Owens, J. I. Hart, J. A. Bolin, G. E. Jasper, J. W. F. and S. F. Parker and D. S. Floyd, of Casey county, as our guest.

In answer to call for clinical cases J. L. Hart reported a troublesome case of rheumatism. The case was discussed by J. W. F. Parker and A. W. Cain and then followed a general discussion of rheumatism. T. R. Griffin mentioned his successful experience with aspirin in the acute stages. J. M. Owens had as his favorite oil of wintergreen administered in milk and cream; 'tis his experience that in the use of this have practically no stomach disturbance. Be guarded, he warned, as to the condition of the endocardial membrane.

T. S. Kennedy mentioned the use of an ointment containing oil of wintergreen and wrapping in cotton and gutta percha tissue.

A. W. Cain reported a case of "tumor" on the back of a man; in location the tumor extended from the scapula to the pelvis. Appeared to be either a fatty or a deeply located cystic tumor. Successfully removed and found to

have large amount of calcareous deposit contained in it, so much so that it was necessary to dissolve them before a specimen could be examined. Pathological report, adenoma, with lime deposits.

D. S. Floyd reported having recently had experience with four cases of "hen-egg" sized tumors protruding through aperture in the vertebra. The four cases in two families, the mothers being sisters. Two lived five days. The doctors spoke of Da Costas' discussion of such subjects.

B. G. Allen mentioned an experience with spina bifida and hydrocephalus; patient living 3 or 4 days.

J. M. Owens, by request again read his paper on "Early Diagnosis and Treatment of Pulmonary Tuberculosis." This aroused much enthusiasm and spirited discussions followed. T. S. Kennedy reported the practice of Langford treating his patients in the tenements of Cincinnati.

C. W. Cain spoke of the report of the experiment board of Philadelphia, as to the inherited properties of tuberculosis being nihil.

J. W. F. Parker said his attention was called to the "contagious property" of tuberculosis by a fellow practitioner and together they were so treating their cases as early as 1854. The doctor went on to comment on the wonderful rapid and beneficial advance made by the profession within the period of his activity. Quoting J. W. F. Parker, "I imagine, I anticipate, yes I verily believe we will yet find some remedy to eradicate the 'great white plague.'" I have reached my advanced age not because I have escaped this contagion, for I have stood with my hand under a poor victim's head and moistened their parched lips or smoothed their pain-stricken brow as they breathed their last contaminated breath; but because I had power of resistance in my system which threw it off. "Different individuals from same family have different predisposition."

Next because of J. M. Owens' paper and its discussions arose a spirited discussion as to "Materna Impression."

B. G. Allen next read a paper on "Diabetes Mellitus." This received favorable comment and was thoroughly discussed by various members.

J. W. F. Parker read an interesting and instructive paper on "The Humanities in Medicine." The paper was complimented and its author thanked.

Following this we had the report of our insurance investigating committee. This aroused lively talks by various members and when thor-

oughly thrashed out I think all could justly say it had "done good."

Nothing further the society adjourned.

S. F. PARKER, Secretary.

Pulaski—The Pulaski County Medical Society met July 11th at 10 A. M. with S. F. Parker and Parker. The president, B. G. Allen, was in the chair and the following members present: A. W. Cain, J. L. Hart, F. A. Taylor, G. M. Reddish and S. F. Parker.

F. A. Taylor reported a case of cystitis in a man 22 years of age, absence of specific history, etiology obscure and symptoms persistent.

A. W. Cain uses "Urotropin" where the patient's urine is alkaline. Get patient to drink large quantities of water and wash the bladder once a day. Some do well on methylene blue.

B. G. Allen: Have had satisfactory experience in rendering urine "bland" with Liquor Potassi in 5 to 10 drop doses. Also employ this method at times in gonorrhoea.

S. F. Parker: Some good results with administration of Bumstead's mixture and irrigation of bladder once daily with normal saline solution.

A. W. Cain: There is a tendency of "good people" to lie to us and attempt deceit about gonorrhea being a possible factor. Further speaking A. W. Cain mentioned gonorrheal conjunctivitis and reported satisfaction in the use of adrenalin in conjunction with boric acid solution.

S. F. Parker: Have had some aid and satisfaction, especially in infants, from hourly application of argyrol in gonorrhoeal conjunctivitis, have no irritation from this and it seems to do the work, keeping wet boric acid compresses constantly over the eyes.

S. F. Parker read a paper on "Infant Feeding" which was favorably discussed by the members present.

Having had a small attendance, but enthusiastic participation by those present the society adjourned.

S. F. PARKER, Secretary.

Todd—Todd County Medical Society met at Pembroke, July 2nd. House called to order by President J. M. Robinson. Minutes of previous meeting read and adopted. J. L. Barker presented a clinical case—man 46 years old, enlarged knee; tapped same and drew off two pints fluid; applied ichthyol, gave previous history of a fall one month before swelling began. R. W. Frey thinks it tuberculous and suggests iodoform emulsion and glycerine. C. M. Gower suggests possibly diseased bone. T. W. Perkins reports similar case in young man twenty years old of seven or eight years standing. E. W. Weathers thinks case of T. W. Perkins not like

the one before us and suggest microscopical examination to exclude gonorrhoea. C. M. Gower reported a case of enlarged ankle—bone obliterated—possibly one of osteosarcoma. Next was case of pistol-shot in left groin, ball ranged downward, patient lost use of limb for six months and recovered entirely. A few weeks ago he received second shot in left side from behind on level with eleventh rib, paralysis followed, lost control of bowels and bladder, can now walk with cane. Shadowgraph shows ball inside of pelvis, second shot lodged on lumbar vertebra. Would like opinion as to prognosis. Should bullet in spinal column be removed? The concensus of opinion being to let him alone as long as he continues to improve.

B. E. Escue's patient reported at last meeting, is better. Under compresses saturated with solution Epsom salts. A case of eclampsia was reported by C. M. Gower. Patient came to office, complained of headache and considerable oedema. Confinement due. Was siezed with spasms by the time she reached home, gave morphine, croton oil, veratrum viride, she vomited everything taken and died later. J. R. Paine would have bled the patient before she left office. Next case man fifty-two years old, whisky drinker, had La Grippe in fall, cough continual, emaciation and night sweats, frequent urination with pain and tenderness in left lumbar region. Examination showed pus in urine, diagnosis, cystitis, suspected stone, had shadowgraph made to detect calculi, found tubercular deposit, also found 6% albumen, urine clear, scant, skin dry. Shadowgraph showed no stone, no tubercular deposit, diagnosed pyelo nephritis, prognosis unfavorable. R. L. Boyd thinks it a surgical case. First paper read by Dr. R. W. Frey on office gynecology. There is scarcely a morbid condition of the pelvis from which women suffer more common than leucorrhoea and while it is admitted to be a symptom it is the direct expression of something in the pelvic cavity which produces a variety of unpleasant symptoms or results, such as itching, pain, languid feeling and occasionally accompanied with disagreeable odor. The normal vaginal secretion is usually scant and white in color, and sometimes mixed with the viscid mucus from the cervix. A muco-purulent discharge is almost sure to be gonorrheal in origin and especially if profuse and yellowish green color. A specimen of this description should always be put under microscope to complete diagnosis. A profuse watery discharge most always has a hydrosalphinx for its pathology. We have one variety due to pregnancy which causes an intolerable itching which no amount of treatment will relieve except the termination of pregnancy. A bloody discharge other than menstrual may be due to a diseased cervix. A bloody discharge should always be

looked upon with suspicion, especially if pinkish in color or sero-sanguineous in character. Should the patient have passed her 45th year and borne children the case should be regarded with greater suspicion still.

We sometimes meet with a variety of leucorrhea in old women due to senile vaginitis. In the management of leucorrhea the cause must be removed, relief will depend on the physician's ability to make intelligent investigation and correct diagnosis. Will mention treatment of one variety—that is cervical hypertrophy with its abrasions and lacerations. To cure them we were formerly obliged to do an amputation of the cervix, sometimes a trachelorrhaphy if much involvement of the glands, this operation frequently followed by stenosis and the last stage of the case worse than the first. No amount of douching will cure these cases until the diseased glands have been destroyed. Treatment, a 20% solution of cocaine on tampon around the cervix for 10 or 15 minutes, steady cervix with tenaculum, take thermo cautery and make 5 or 6 incisions into cervix this procedure is repeated every 2 or 3 weeks until the entire cervix has been treated and all glands destroyed.

There being no further business the meeting adjourned to meet at Trenton first Wednesday in August with the following program: "Gunshot Wounds" by T. W. Perkins; "Diagnosis and Treatment of Gastric Ulcer," by B. D. Tyler; "Cancer of Uterus," by J. M. Robinson.

L. P. TRABUE, Secretary.

Warren—The regular meeting of the Warren County Medical Society was held in the Doctors' Club-room, Wednesday, August 14, 1907. In absence of the president, the vice-president, T. W. Stone presided. A large delegation of county physicians were present.

B. S. Rutherford opened the meeting with a report of a case of accidental symphysiotomy. Patient, negro, first delivery a monstrosity, second delivery forceps, third delivery, this accident occurred; the pains were hard, labor continued over a long period of time without progress, chloroform administered, forceps applied, great amount of force used to no avail, after a great deal of pulling by bracing the feet against the bed I felt something give way, the forceps were removed, the fundus manipulated and with one pain the child was born. On examination I found the symphysis separated, for several years the patient walked with difficulty. Three years later she had a normal labor.

J. F. Roger: I have never seen a case like the one reported.

A. T. McCormack: It is remarkable that the patient recovered. A false joint is most difficult to unite.

D. B. Stone: I think symphysiotomy is to be preferred to Ceasarian section.

I consider this case a rare accident.

L. H. South: This accident is rare, because high forceps occurs in one out of every 100 cases. The fault is in the line of traction. In Peterson's and Jewett's Obstetrics that I reviewed for the July Journal each author says in the most difficult justifiable forceps deliveries the amount of force should not exceed seventy pounds. In properly conducted forceps operation the force employed will seldom exceed twenty-five or thirty pounds. This accident occurred because the operator was not pulling in the direction of the curve of the pelvis. Symphysiotomy should be relegated to the past.

J. H. Souther gave a short talk on Colles fracture.

In the discussion J. H. Blackburn gave the pathology of the fracture.

E. N. Hall: I fortunately have always had good results because I always chloroform the patient, then reduce the fracture and apply splints.

A. T. McCormack: Always explain to the patient that there will probably be a deformity, do not treat the fracture without using an anesthetic; after reduction apply the splint while holding the hand. I consider a splint always necessary.

D. B. Stone: I have had seven colles fractures in nineteen years, with very good results; I always use an anesthetic and plaster of Paris bandages.

T. W. Stone: I prefer a narrow splint, at the end of a week I consider it very important to begin massage.

A. T. McCormack: I want the opinion of this society in regard to establishing a State fund for defense against mal-practice suits. Nine State societies defend their members against mal-practice suits, each member is assessed one dollar, the proceeds from this fund defends all suits. A motion was made and carried that our delegates be instructed to support this measure at the State meeting in October.

J. H. Blackburn announced that he had completed his program for September and it would appear in the Journal each month. The society adjourned to meet the last Wednesday in September.

LILLIAN SOUTH, Secretary.

COUNCIL OF PHARMACY.

MERCUROL.

Mercurol is an organic compound of mercury with nucleic acid from yeast, containing 10 per cent. of metallic mercury.

Actions and Uses.—Mercurol does not coagulate albumin; it has marked bactericidal power and possesses the pharmacologic act-

ion of soluble mercury compounds. It is recommended as a local antiseptic application and as an antisymphilitic remedy. Dosage.—0.03 to 0.12 Gm. ($\frac{1}{2}$ to 2 grains). Manufactured by Parke, Davis & Co., Detroit, Mich.

MESOTAN.

Mesotan, $C_9H_{10}O_4$, is the methyl-oxyethyl ester of salicylic acid, analogous to wintergreen oil.

Actions and Uses.—The action of mesotan is similar to that of oil of wintergreen, but it is more irritating to the skin. Dosage.—Being quite irritating when applied pure to the sensitive skin, it is employed diluted with an equal volume of olive oil, and without friction. Simple application to the affected part, which need not be covered, or, if so, only slightly, suffices to give prompt relief. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York).

METHAFORM.

A name applied to chlorbutanol (which see). Manufactured by F. Stearns & Co., Detroit, Mich.

MIGRAININ.

A mixture of antipyrine 85 parts, caffeine 9 parts and citric 6 parts.

Actions and Uses.—It is antipyretic and analgesic, combining the actions of its components. Dosage. — 0.4 to 1 Gm. (6 to 15 grains) in powder, cachets or tablets, the dose being repeated once or twice during the day. Manufactured by Farbwerke, vorm. Meister Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

NEUROCAINE.

Each billet contains cocaine hydrochloride 0.05 Gm. (1-12 grain), without excipient. The billets are 1-8 inch long, 1-20 inch in diameter and very soluble. Neurocaine is used for pressure anesthesia or as a local anesthetic in dental practice. Prepared by Schieffelin & Co., New York.

NEURONIDIA.

An elixir said to contain in each 8 Cc. (2 fluidrams) 0.26 Gm. (4 grains) of veronal (diethylmalonylurea in a menstruum containing 35 per cent. of alcohol, with aromatics.

Dosage.—(8 to 16 Cc.) (2 to 4 fluidrams). Prepared by Schieffelin & Co., New York.

NUTROSE.

Nutrose is a sodium salt of milk casein, containing 65 per cent. of proteids.

Actions and Uses.—Nutrose is recommended as a non-irritant nutrient in wasting dis-

eases, such as the cachexias in carcinoma, anemia, diabetes, etc., and in acute and chronic febrile ailments, such as pneumonia, typhoid fever and tuberculosis. Manufactured by Farbwerke, vorm. Meister, Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

NOVOCAINE.

Novocaine, $C_6H_4NH_2(COO.C_2H_4.N(C_2H_5)_2)HCl = C_{13}H_{21}O_2N_2Cl$, is the monhydrochloride of para-aminobenzoyldiethylaminoethanol.

Actions and Uses.—It is a local anesthetic similar to cocaine, but said to be far less toxic than any of the cocaine substitutes. When injected subcutaneously it is said to exert a prompt and powerful anesthetic action, but the effect is not sustained. This may be remedied by the simultaneous injection of suprarenal alkaloid. Novocaine is not irritant. It is recommended in all cases in which cocaine is indicated. Dosage.—For infiltration anesthesia, solutions of 0.25 Gm. (4 grains) novocaine in 100 or 50 Gm. (3.2 or 1.6 ounces) physiologic salt solution, with or without 5 or 10 drops of suprarenal alkaloid solution (1:1000); for instillations and injections, solutions of 0.1 Gm. (15.4 grains) novocaine in 10 or 5 Gm. (150 or 75 grains) salt solution, with or without 10 drops of suprarenal alkaloid solution (1:1000). In ophthalmology, 1 to 5 to 10 per cent. solution and in rhinolaryngology 5 to 20 per cent. solutions are recommended, with the addition of 6 to 8 drops of suprarenal alkaloid solution (1:1000) to each 10 Cc. (160 minims). Internally, owing to its feeble toxicity, it may be given in doses up to 0.5 Gm. (7 1-2 grains) to adults. Manufactured by Farbwerke vorm. Meister, Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

ORTHOFORM-NEW.

Orthoform-new, $C_6H_4(COO.CH_3)(NH_2)(OH)$, 1:3:4= $C_8H_9O_3N$, is the methylester of meta-aminopara-oxybenzoic acid.

Actions and Uses.—Orthoform-new is a local anesthetic, resembling cocaine in its local action, but not penetrating the tissues on account of its insolubility. It has practically no action on the unbroken skin and produces no irritation except slight corrosion about the place of application. It is somewhat antiseptic and practically non-toxic in the usual doses. It is used internally to relieve the pain in gastric ulcer. Since it acts only on ulcerated surfaces, the relief of pain has been assumed to be evidence of the existence of an open ulcer. It has been applied locally as an analgesic to wounds of every description. It has been used in dentistry, in nasal catarrh,

hay fever, etc. Dosage.—Internally, 0.5 to 1 Gm. (8 to 15 grains) in emulsion; locally, in substance as a dusting powder or mixed with milk sugar for insufflation, dissolved in ether and mixed with oil for pencillings, or as salve with wool fat (lanolin), etc. Manufactured by Farbwerke vorm. Meister, Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

ORTHOFORM-NEW HYDROCHLORIDE.

Orthoform-new hydrochloride $C_6H_5O_3N.H.Cl$, is the hydrochloride of metanido-para-oxybenzoic methyl ester.

Actions and Uses.—The actions, uses and dosage of this compound are similar to those of orthoform-new, which see. Manufactured by Farbwerke vorm. Meister, Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

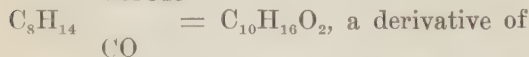
OVOFERRIN.

Ovoferrin is a solution containing 5 per cent. of an artificial proteid-product in which iron is present in the so-called "organic" or "masked" form (a form which does not give the iron-test directly). The solution also contains 10 per cent. of alcohol and some aromatics.

Actions and Uses.—Ovoferrin is not appreciably affected by the gastric juice, a 0.5 per cent. solution of hydrochloric acid liberating its iron very slowly and incompletely. The product ranks with the other forms of artificially masked iron, which are devoid of the local action of the soluble inorganic iron salts, and, according to some authorities, are more readily absorbed and utilized. Dosage.—8 to 16 Cc. (2 to 4 fluidrams) corresponding to from 0.03 to 0.06 Gm. (1-2 to 1 grain) three times a day. Manufactured by Barnes & Hille, Philadelphia.

OXAPHOR.

Oxaphor is a 50 per cent. solution of oxycamphor.



camphor in which a hydrogen atom has been replaced by a hydroxyl group.

Actions and Uses.—Oxaphor is a depressant to the respiratory center, but is said to have no effect on circulation and secretion. It is recommended as a substitute for morphine in respiratory disorders, chiefly in cardiac dyspnea and asthma. It is said to have been used with advantage in renal affections, in emphysema, bronchitis, etc. Freedom from undesirable side-effects is claimed as an advantage over morphine. Dosage.—2 to 3 Gm. (30 to 45 grains) of oxaphor in a little water, wine, syrup or other desirable adjuvant. Man-

ufactured by Farbwerke, vorm. Meister, Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

IODIPIN 25 PER CENT.

A preparation similar to the preceding, but intended for hypodermic administration.

Dosage.—2 to 6 Cc. (30 to 90 minims) by hypodermic injection. This article is also marketed in the form of capsules, each containing 2 Gm. of iodipin 25 per cent. Prepared by E. Merck, Darmstadt. (E. Merck & Co., New York).

IODOFORMOGEN.

A nearly odorless mixture of iodoform and albumin.

Actions and Uses.—Its action is that of iodoform, which is slowly liberated in connection with wound surfaces, making the action more persistent. It limits secretion, favors granulation and promotes drying. Iodoformogen is recommended as a dusting powder for ulcerated surfaces. Dosage. — Being about three times as voluminous as iodoform, it is usually applied undiluted to the affected parts. It may be used as a snuff in ozena, mixed with an equal amount of boric acid. Manufactured by Knoll & Co., Ludwigshafen a. R. and New York.

IODOTHYRINE.

Iodothyrene is a milk sugar trituration of the active principle of thyroid gland, 1 Gm. representing 1 Gm. of fresh gland and containing 0.0003 Gm. of iodine.

Actions and Uses.—It is similar in action to Glandulæ Thyroideæ Siccæ, U.S.P., but it is claimed to possess the advantage of more definite strength and absence of decomposable extraneous matter. Dosage.—Adults, 0.6 to 2 Gm. (10 to 30 grains); children, 0.3 to 1 Gm. (5 to 15 grains) per day. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York). E. Merck, Darmstadt (Merck & Co., New York).

ISOFORM POWDER.

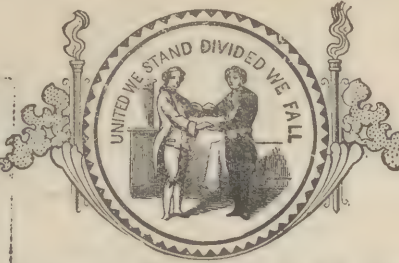
Isoform powder is a mixture of para-iodoxy-anisol, $C_6H_4(OCH_3)(IO_2)$ 1:4 = $C_7H_7O_3I$, an iodoxy-derivative of anisol, with an equal weight of calcium phosphate.

Actions and Uses.—It is a germicide and antiseptic in consequence of its oxidizing power and, in contradistinction to iodoform, it acts not only in a medium free from oxygen, but in conjunction with free access of air. It is claimed to be non-toxic in comparatively large doses and to be absolutely non-irritant to the unbroken skin. It is recommended as a substitute for iodoform. Dosage.—Internally, 0.65 to 2 Gm. (10 to 30

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OCT. 7 - 1907



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No. 9.

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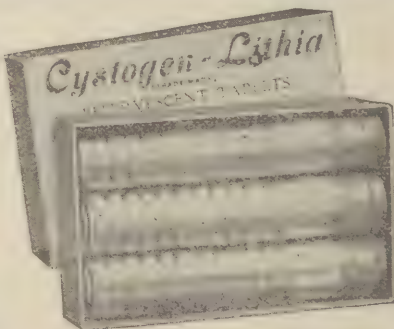
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VOL. V, No. 9.



OCTOBER, 1907.

\$2.00 YEARLY.

RAILROAD RATES FOR THE STATE MEETING.

The Southern Passenger Association have granted a rate of one fare plus twenty-five cents to all persons attending the State meeting. The rate was made for the Masonic Grand Lodge but as the dates are the same the rate will apply to us doctors. Tickets will be on sale October 14 and 15 and are good returning up to midnight of the 19th. As several other conventions will meet in Louisville at the same time you had better engage your hotel room in advance.

OUR ANNUAL MEETING.

The official call and the preliminary program for the 52nd Annual Session of the Kentucky State Medical Association is published in this number of the JOURNAL. The spontaneous interest in every phase of the work by the entire membership promises a larger attendance and better work than we have heretofore been able to obtain. The scientific program presented by the Committee on Scientific Work, of which Steele Bailey is Chairman, is an earnest of the scientific feast with which those in attendance will be regaled. Fraternal delegates will be present from adjoining States, several of the officers of the American Medical Association will take an active part in our deliberations, and more and better than all else, the splendid rank and file of the great profession of this grand old Commonwealth will exhibit the large share of altruism, of hard study and hard work, of readiness to do good, and of accord

and unity that makes our Association conspicuous. Each of us should bend all our energies to the present.

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PROBILIN.

Report on Probinin by the Council on Pharmacy And Chemistry—With Comments.

The following report has been submitted to the Council on Pharmacy and Chemistry by a subcommittee to whom Probinin was assigned (Pilulae Probininae. Dr. W. Bauermeister. Goedecke & Co., Leipzig, Germany. Schering & Glatz, New York, sole agents for the United States):

To the Council on Pharmacy and Chemistry:

Probinin pills are said to be made according to a formula published by Dr. W. Bauermeister in *Therapeutische Monatschrift*, May, 1904. In a circular published by the American agents, Schering & Glatz, the statement is made that each pill contains $1\frac{1}{2}$ grains of salicylic acid and acid sodium oleate. The circular accompanying each package of Probinin reads as follows: "They are a combination of salicylic acid with acid sodium oleate to which sufficient phenolphthalein and menthol have been added to stimulate the gastrointestinal tract mildly and to insure tolerance."

A more complete formula appeared in an article by Reynold Webb Wilcox, M.D., LL.D., of New York, in *The Journal of the American Medical Association*, Aug. 4, 1906. Inasmuch as this article was reprinted, in a garbled form, and circulated by Schering & Glatz, and as they indicate, both in the body of the article and in the footnote, that the preparation referred to by Dr. Wilcox was Probinin, one is naturally justified in assuming that the detailed formula as published by Dr. Wilcox is the formula claimed by the manufacturers of the product or, at least, by their American agents. This formula is as follows:

Acid sodium oleate $1\frac{1}{2}$ grains.

Acid salicylic $1\frac{1}{2}$ grains.

Phenolphthalein 1 grain.

Menthol $\frac{1}{4}$ grain.

Mix and make into one pill.

The active ingredients in the above formula would make a pill that would weigh approximately 275 mg. or $4\frac{1}{4}$ grains, without the addition of any excipients, dusting powder or moisture. But on weighing a number of Probinin pills, taken from the original package purchased in the open market, they were found to weigh approximately only 210 mg. each. While each of the four active constituents mentioned in the formula is soluble in alcohol, it was found that when Probinin pills were extracted with alcohol only

(Continued on Page Sixty-Eight.)

RECIPROCITY.

While our State Board of Health has tried to give the widest possible publicity to the conditions upon which reciprocity with other States can be secured, physicians all over Kentucky are constantly getting into trouble about it on account of their failure to secure or keep up their Society membership. It should be understood that reciprocity is a privilege and not an inherent right. We have arranged for an interchange of licensure, without examination, with about twenty-five States. As one of the essential conditions before our State Board can endorse anyone for reciprocity he must have been a member of the county, State, and National Medical Association of the school or system of medicine to which he belongs for at least one year, and be recommended as worthy of reciprocity at a stated meeting of this county or State society. The purpose of such provision is evident and its importance to us is paramount as Kentucky is the only State which has entirely rid itself of itinerant and advertising doctors. To give this class the benefit of reciprocity would soon fill the State with them and we would have to cut everybody off from the privilege without this safeguard. In addition our State Board holds that no man is worthy of its certificate to another State who does not avail himself of the benefits of society membership in his own system or school, and who is not endorsed by his professional neighbors in the light of the kind of knowledge of his worth and character which it is difficult to obtain in any other way except in the actual work month after month of a medical society.

Now to show the importance and practical working of all this, we may quote a few concrete examples. On the same day, last week two physicians applied for reciprocity with Tennessee. One, from Owsley county, had

not been a member of his county society and therefore is not eligible for reciprocity with Tennessee under our agreement with its State Board, and he will be required to take the examination. The other applicant was from McCracken county where he was a member of the county society, of the State Association and of the A. M. A. He was recommended by his society as worthy of reciprocal recognition. He will secure his license in Tennessee in less than a week.

A few days later two applications came in from Carter County on the same day, one desiring to register in Kansas, the other in West Virginia. There is no society in Carter County and the good States of Kansas and West Virginia will not receive physicians from counties which cannot maintain a society where the physicians may meet for mutual intercourse and improvement.

REGISTRATION.

The Registration Department will be in the 2nd Floor Hall at the Galt House. For admission to the various sessions, exhibits and entertainments, it will be necessary for every member to register his name, and those of his guests, and to obtain the official buttons provided by the Committee on Arrangements. No one will be admitted to any meeting or entertainment without a button.

Members are requested to observe the following directions:

1. Each physician desiring to register will fill out a registration card.
2. Present this card to the registration clerk and if the name is found properly enrolled as a member of the county society, *with all county and State dues fully paid*, a badge will be issued.
3. New members of county societies may be registered if provided with proper credentials by their officers, or if personally presented by such officers.

4. Each member, on registration, will receive a badge, a copy of the program, and such other announcements as may be necessary.

OF INTEREST TO ALL.

It is our privilege to announce that several of the largest and most active insurance companies who pay the standard \$5 fee for medical examinations are dropping the men who permit their names to be retained on the roll of the \$3 companies. This is as it should be. In most Kentucky counties it will mean that the \$3 companies, and especially the New York Life, which is the head and front of the offenders will continue to get along without examiners. In this connection we advise the physicians in every county to go to work systematically to persuade any good agents which have remained with the New York Life and other cut rate companies to accept agencies with reliable companies which are entitled to the confidence of the public and the co-operation of the profession.

AN OUTLINE.

The Annual Address of the President will be delivered at the Galt House on the morning of Tuesday, October 15, and will be followed by the Oration in Surgery. The Oration on Medicine will be delivered at 12 noon on Wednesday, October 16. On Wednesday evening at the Galt House, Dr. George H. Simmons, of Chicago, the Editor of the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION and its Secretary, will deliver a public address on "What the American Medical Association Stands For." This will be followed by a demonstration of the Opsonic Index by Prof. J. B. Marvin, of Louisville. On Wednesday evening, October 16, the Jefferson County Medical Society will receive in honor of the members and guests of the State Association at the Galt House.

PRELIMINARY PROGRAM OF THE FIFTY-SECOND ANNUAL SESSION OF THE KENTUCKY STATE MEDICAL ASSOCIATION TO BE HELD AT THE GALT HOUSE, LOUISVILLE, KENTUCKY, OCTOBER 15, 16 AND 17, 1907.

MORNING SESSION, FIRST DAY, TUESDAY, OCTOBER 15, 1907, 10 O'CLOCK.

- Call to Order* By the President
Opening Prayer By the Rev. T. M. Hawes, Louisville
Address of Welcome By His Honor, Mayor R. W. Bingham
Response By C. Z. Aud, Cecilian
Report of Chairman of the Committee on Arrangements
 By R. Alexander Bate, Louisville

Annual Address of the PresidentD. M. Griffith, Owensboro

Address in Surgery, "The Surgical Treatment of Diseases of the Gall Bladder"By W. A. Quinn, Henderson

AFTERNOON SESSION, FIRST DAY, TUESDAY, OCTOBER 15, 2 P. M.

1. "*Lacerations of the Vaginal Outlet*". By F. M. Beard, Shelbyville

Abstract:—Causes of lacerations, predisposing and exciting, Classification: Partial, complete, with or without tear of the vaginal wall. Complete, of the recto-vaginal septum, with or without tear of both or either rectal or vaginal wall. Repair, whether primary or secondary. Early primary operation the one necessity. Secondary operations should be advised on all cases demanding it. The operation. Report primary operative cases. Report of two cases of secondary operation.

Case I. Complete laceration of the perineal body, of 37 years' standing, with beginning rectocele and cystocele. Operation. Complete recovery.

Case II. Complete rupture of the vaginal septum one year ago, with failure of primary operation, and incontinence of feces. Secondary operation.

2. "*Technique of a New Perineorrhaphy*". By M. Casper, Louisville

Abstract:—Waldo's operation.

Discussion of Papers 1 and 2 to be opened by Arch Dixon, Henderson, and Jno. Freeman, Louisville.

3. "*The Work of County Society Officers*"

.By J. W. Crenshaw, Versailles

Abstract:—(1), The history of the Woodford County Medical Society and its struggle for existence during 3 or 4 years.

(2), The causes which operated, preventing the steady and healthy growth of the Society from its inception.

(3), Its condition now and the causes conducive thereto.

(4), Conditions necessary in the author's opinion promotive of an ideal medical society.

Discussion to be opened by D. C. Bowen, Elizabethtown, and J. E. Wells, Cynthiana.

4. "*The Surgery of Inguinal and Femoral Hernia*"

.By August Schachner, Louisville

Abstract:—The anatomy concerned in the production of hernia. The anatomy concerned in the cure of hernia. The basic principles involved in the various operations, many of which are mere modifications of minor details rather than change of basic principles, which have virtually remained intact throughout the vast variety of operative procedures. (Illustrated by charts).

Discussion to be opened by A. Morgan Vance, Louisville, and Frank Boyd, Paducah.

5. "*Some Facts, Fads and Fancies in Therapeutics*"

.By W. Lucien Heizer, New Haven

Abstract:—(1), Tendency and age of therapeutics.

(2), Basis of therapy.

(3), Some specific errors and abuses:

(a), Digestive ferments.

(b), Proprietarys.

(1) Extent and cause of their use.

(2), Hydrocaine.

(3), H. M. C. Anaesthesia.

Discussion to be opened by Geo. H. Simmons, Chicago, and B. M. Taylor, Greensburg.

6. "*The Value of Laboratory Methods to the Country Practitioner*" By J. R. Cowan, Danville

Abstract:—The present effort in medicine to attain the highest possible degree of accuracy. Interdependent relationship of laboratory worker and clinician.

Tendency to specialism, and great amount of new material added yearly to medical literature. Isolation of the country practitioner lays him under special obligations to keep posted.

The laboratory should inspire country practitioner with desire for accuracy and dissatisfaction with "snap" diagnosis.

What portions of laboratory work are open to the country practitioner? His lines of limitation are determined solely by individual effort.

Estimation of value of laboratory to the physician in self-culture and as a business asset. Value to the patient.

Discussion to be opened by J. K. W. Piper, Russellville.

7. "*Differentiation Between Lobar and Catarrhal Pneumonia*" By J. S. Wesley, Liberty

8. "*Advantages of the Modified Blood Clot Dressing in the Mastoid Operation*" By J. A. Stucky, Lexington

Description of the modified Blood Clot method as used by the Author, with his perforated rubber tubing and no packing in operations upon the mastoid.

Brief review of 53 cases in which Blood Clot or modified Blood Clot method was used.

Shortening convalescence, lessening scar.

Indications for its non-use.

Discussion to be opened by A. H. Edwards, Hopkinsville, and S. Cohn, Fulton.

9. "*Varicose Veins of the Lower Extremities*," By J. M. Salmon, Ashland.

Abstract:—Anatomy. Etiology. Description of symptoms, course and complications. Methods of treatment and review of literature. Best results obtained by combination of Casati and Schede methods with excision of varicose ulcers and closure of defects by Thiersch grafts. Operative technique. Report of cases. Conclusions.

Discussion to be opened by A. M. Cartledge, Louisville, and J. V. Prewitt, West Point.

10. "*The Technique of Appendectomy*,"

By J. E. Cannaday, Fraternal Delegate from West Virginia State Medical Association, Hansford, W. Va.

Discussion to be opened by L. S. McMurtry, Louisville, and F. D. Cartwright, Bowling Green.

EVENING SESSION, FIRST DAY, TUESDAY, OCT. 15, AT 8:00 P. M.

1. Address: "*What the American Medical Association Stands For*,"
By George H. Simmons, Secretary, and Editor of the

Journal of the American Medical Association, Chicago, Ill.

2. "*The Opsonic Index*," (Magic Lantern Illustrations.)
 By J. B. Marvin, Louisville.

MORNING SESSION, SECOND DAY, WEDNESDAY, OCTOBER 16, 9 A.M.

1. "*Constipation*," By J. T. Green, Leitchfield.

Abstract:—Constipation, Chronic. Causes: Gastrogenic, Enervation, Patent, so-called liver medicine, Purgatives as generally given.

Treatment: Electric, Vibratory and Dietetic.

Treatment in an institution more successful than home treatment.

2. "*Constipation*," By John Mason Williams, Louisville.

Abstract:—Etiology. Consequences or effects both reflex, and functional, and directly on abdominal organs. Treatment: Medical, mechanical, surgical and electrical.

Discussion of papers 1 and 2 to be opened by J. W. Kincaid, Catlettsburg, and J. M. Peck, Arlington.

3. "*Osteomyelitis*," By J. G. Carpenter, Stanford.

Abstract:—Acute, chronic, sub-acute, etiology, symptoms, diagnosis, early diagnosis and treatment. The early operation, intermediate operation, late operation, pathology and prognosis. The use of decalcified oxbone in bone cavities with the reports of two successful cases in country surgery. No suppuration, recovery complete and useful limbs preserved.

4. "*Tuberculosis of Bone*," By B. F. Van Meter, Lexington.

Abstract:—An early diagnosis is the paramount issue. With an early diagnosis and proper treatment, probably 90% of the cases are cured; 75% functionally.

The pathology is that of the tubercle of all other tissue. The tubercle bacilli whether dead or alive possesses a peculiar characteristic of killing tissue cells in their immediate vicinity by process of fatty degeneration.

The symptomatology is based upon pathology, and follows a parallel line thereto. I know of no condition in medicine where the symptoms as a rule more truly portray the nature and pathology of a given case. The symptoms are more trustworthy in tuberculosis of the bone than in pulmonary tuberculosis.

The tubercle bacilli primarily, almost universally attack the cancellous tissue of bone, therefore the bodies of the vertebra and articular ends of the long bones are necessarily its favorite places of attack. The cardinal symptoms being muscular rigidity, pain (often referred) and a chronic course, if borne in mind, should make the diagnosis easy in the majority of cases. There are some cases where an early diagnosis is almost if not quite impossible, the lower lumbar or sacral spine, for instance.

The diagnosis and treatment of tuberculosis of the spine and knee will be discussed in a general way. It is believed that the Biers congestion treatment is a distinct advance and invaluable aid in the joints where it can be properly carried out. Some other modifications in treatment will be discussed.

Discussion of papers 3 and 4 to be opened by P. H. Stewart, Paducah, and B. L. Holmes, Carrollton.

5. "*The Leadership in Medical Organization*,"
 By W. W. Richmond, Clinton.

6. "*Practical Municipal Sanitation*,"
By R. L. Woodard, Hopkinsville.

Abstract:—What Local Boards of Health should be. Organization of boards of health. What municipal boards of health should do. The special reference to water supply. Food inspection. The control of contagious diseases. The control of public schools. Municipal cleaning.

Latitude should be allowed boards; they should make the laws and regulations to suit cases as they may arise.

The recording of all vital statistics; how and by whom should be done.

The control of quarantine.

These various headings will be discussed at some length and suggestions made as to their practical management.

Discussion to be opened by M. K. Allen, Louisville, and J. M. Mathews, Louisville.

7. "*Cholecystectomy*,"By A. H. Barkley, Lexington.

Abstract:—Cholecystectomy not an old operation performed by Langenbuch in 1882, other operators followed him with good results.

Need for this operation apparent to all who do work along this line: It employment largely determined by condition found when abdomen is opened.

As a rule it does away with drainage and when it is necessary it can be done by inserting a tube in the duct.

Operative interference demanded for inflammatory trouble present.

Gall bladder of no particular use except as a store house for bile and can be dispensed with entirely.

Cholecystectomy may prevent future malignancy and certainly does prevent formation of stones in gall bladder and cholecystitis.

Injuries, gangrene and inflammatory troubles, fistula and primary carcinoma constitute valid reasons why cholecystectomy should be performed.

Objections to its performance. Some are not valid objections.

Twenty-two surgeons report mortality in uncomplicated cases quite as good as in cholecystotomy. Word about the operation. Cases reported.

Discussion to be opened by W. H. Wathen, Louisville, and R. Alexander Bate Louisville.

SPECIAL ORDER AT 12:00 M.

- Address in Medicine:* "*Preventive Medicine and Sanitation*,"
By Clarence H. Vaught, Richmond.

AFTERNOON SESSION, SECOND DAY, WEDNESDAY, OCTOBER 16, 1907.
 AT 2:30 P. M.

1. "*Exophthalmic Goitre*,"By Jno. G. Cecil, Louisville.

Abstract:—Primarily a disease of the thyroid gland as opposed to the theory that it is a pure neurosis.

Characteristic symptoms, Tachycardia. Exophthalmos. Thyroid enlargement. Erythematous Flushing.

Diagnosis: Only difficulty is with the partially developed forms.

Treatment: Rest and medicinal, these failing recourse to surgery. Showing good results of partial thyroidectomies.

2. "*The Surgical Management of Goitre*,"
By W. C. Holloway, Lexington.

Abstract:—Goitre or enlargement of the thyroid gland, may be due to functional derangements, inflammations, hypertrophies or tumors, and may be associated with increase or decrease of the normal secretion of the organ.

The symptoms demanding relief and justifying even so serious an operation, when other measures fail may be due to the pressure upon one or more of the vital structures with which it is intimately associated, or to the hyperthyroidism. In the latter condition commonly known as Grave's disease the results of surgical interference are most favorable.

The successful treatment of goiter, in a large percentage of all cases is essentially surgical. Positive diagnosis is easily made. Early operation should precede the development of distressing symptoms.

Notwithstanding the brilliant results obtained by a few surgeons of large experience, operations for the relief of goiter are far less common than the present state of our knowledge would seem to justify. This is partly due to lack of preparation on the part of the surgeon, but principally to the fact that the benefits to be derived are not as yet generally appreciated. The mortality compares favorably with that of other major surgery while the percentage of cures and of cases showing marked improvement is most satisfactory and encouraging.

The field of operation is not inviting to the surgeon who is not thoroughly conversant with the anatomy of this interesting region, and who does not care to risk its dangerous possibilities. Excessive hemorrhage, either immediate or secondary, injury to the laryngeal nerve, perforation of the trachea or oesophagus, removal or injury of the mysterious parathyroids, air embolism, in addition to tetany, myxedema, and the ever present danger of wound infection are among the things he must avoid. Beyond this the operation presents no special difficulty.

The choice of anaesthetic depends upon anaesthetist rather than upon the method of producing anaesthesia. In skillful hands ether has proven both safe and satisfactory. In suitable cases local anaesthesia may be used.

A transverse collar incision through the skin and superficial muscles, with section of the deeper muscles in the few cases where retraction will not suffice, exposes the enlarged gland. The capsule is opened, and if possible the cyst or tumor is enucleated. If the enlargement is diffuse the removal of one lobe and the isthmus, or removal of a part of both right and left lobes is done. Early ligation of the superior laryngeal artery, with ligation of the inferior laryngeal as soon as it is exposed will control the principal blood supply. Anastomosis is very free, hence all vessels should be cut between clamps. It is of the greatest importance that the posterior portions of the capsule be preserved, thus sparing the parathyroids. Development of tetany and myxedema may thus be avoided. Drainage should be used in every case of exophthalmic goiter.

Operative treatment is worthy of much more general application than has heretofore obtained.

3. "A Pharmacological Consideration of the Thyroid Gland,"

.....By V. E. Simpson, Louisville.

Abstract:—I. Preparations, chemical properties and dosage.

II. Action, when administered as a drug, on the various systems of the body with especial reference as to how such action occurs. Relation to other groups; Iodin content.

III. Therapeutical applications.

(a) General reference to organo-therapeutics.

(b) Indications due to defective function of the gland.

(c) Indications due to total absence of function of gland by removal and disease.

(d) Indications where gland function is apparently normal.

(e) The permanency of effects.

IV. Contraindications.

V. Administrations.

(a) Selection of preparation: Active principles, serum, raw and powdered forms.

(b) Mode of medication: size and frequency of dose.

Discussion on papers 1, 2 and 3 to be opened by Irvin Abell, Louisville, Geo. L. Sprague, Lexington, G. A. Hendon, Louisville, and Geo. Jenkins, Louisville.

4. "*The Plans and Possibilities of the Proposed Course of Post Graduate Study of the American Medical Association*," By Jno. H. Blackburn, Bowling Green.

The need for improvement in the medical profession, new and old, today. The duty of the State Examining Boards in elevating the entrance and graduating requirements. The duty of medical schools in meeting these requirements. Practicing physicians can not be reached by these means. The improvement of these members must be from within the profession itself, by organizing and educating them. The organization of County Societies by inaugurating the proposed course of study. A detail of the plans and scope of the course. The possibilities of the profession in following a systematic course of study. The establishment of clinical laboratories and libraries by county societies. The use of the proposed course as a "reading course."

Discussion to be opened by J. E. Wells, Cynthiana, Silas Griffin, Henderson, and J. N. McCormack, Bowling Green.

5. "*The Surgeon and Surgical Methods*,"
.....By Louis Frank, Louisville.
Discussion to be opened by J. H. Letcher, Henderson,

6. "*Typhoid Fever*," By J. C. McCreary, Cave City.
Abstract:—Complications, Prognosis, Prophylaxis, Treatment.

7. "*Typhoid Fever,—the Difficulties of a Country Practitioner in Its Diagnosis*,"By S. R. York, Centre.

Abstract:—1. Reasons for selecting subject.

2. Symptoms given in text books.

(a) Digestive, (b) Circulatory, (c) Nervous system, and their value in diagnosis.

3. Value of tests, (a), (b), (c).

4. Difficulty in diagnosing from malaria.

5. Report of cases.

8. "*Typhoid Fever*,"By W. F. Hickle, Hubble.

Abstract:—Historical. Etiology. Pathology. Complications. Diagnosis, Treatment.

9. "*Summary of My Experience with Typhoid Fever, and Its Complications*,"By D. H. Erkiletian, Laytorsville, Ky.

Discussion of papers 6, 7, 8 and 9 to be opened by William Bailey, Louisville, J. W. Scott, Lexington, T. J. Shoemaker, Morganfield, and E. N. Hall, Woodburn.

EVENING SESSION, SECOND DAY, WEDNESDAY, OCTOBER 16, 1907.

The Jefferson County Medical Society entertains in honor of the officers members and guests of the Kentucky State Medical Association.

MUSIC, DANCING, CARDS, REFRESHMENTS.

MORNING SESSION, THIRD DAY, THURSDAY, OCTOBER 17, AT 9 A. M.

1. "*Congenital Dislocation of the Hip*,"
.....By Jno. B. Richardson, Louisville.

Abstract:—Frequency. Pathological Anatomy. Lorenz operation. Accidents that may occur during its performance. Results reported. Results seen personally. Later statements of men who still are treating this condition surgically.

Discussion to be opened by A. H. Frierburg, Cincinnati, O., and B. F. Van Meter, Lexington.

2. “*Training, a Prophylaxis for Nervousness*,” By E. Duff Burnett, Louisville.

- Abstract:**—1. The infant, habit and discipline.
2. The child, the malleable period.
3. Puberty, the anxious hour.
4. Motherhood, woman’s crowning prerogative.

Discussion to be opened by M. H. Yeaman, Louisville, Milton Board, Paducah.

3. By J. B. Kinnaird, Lancaster.

1. “*The Treatment of Anemia*,” By Curran Pope, Louisville.

Abstract:—General considerations of Anemia and its symptomatology, its frequency as a secondary complication. The blood state, both hemaglobin and corpuscular, the author’s personal investigations and observations, the frequent failure of drugs, the value of certain methods. Hydrotherapy, massage, electrotherapy, diet and hygiene, etc. Conclusions.

Discussion to be opened by B. F. Zimmerman, Louisville, and Geo. W. Armes. Leitchfield.

4. “*The Trinity of Urolog*,” By Carl L. Wheeler, Lexington

Abstract:—The urological aspect of the microscope, studying urinary findings in diagnosis or pathological conditions of the uro-genital tract.

The range of the ureteral catheter. The value of the cystoscope.

Discussion to be opened by I. N. Bloom, Louisville, and E. Lee Heflin, Louisville.

5. By W. H. McCracken, Bowling Green.

6. “*A Few Suggestions to the Young Practitioner*,”
. By E. B. McMorries, Clinton.

AFTERNOON SESSION, THIRD DAY, THURSDAY, OCTOBER 17, 1907.

1. “*Diagnosis and Prevention of Diphtheria*,”
. By A. L. Wagoner, Scottsville.

- Abstract:**—I, Importance of early recognition.
II, Bacetria concerned in mixed infection.
III, Description of onset and differentiation from tonsillitis.
IV, Clinical history and course of the disease.
V, Methods of transmitting, treatment, mortality.
VI, Disinfection.

2. By J. B. Kinnaird, Lancaster.

3. By Jno. M. English, Elizabethtown.

4. “*Management of a Primapara During Pregnancy and Labor*,” By Lillian H. South, Bowling Green.

Abstract:—Exercise. Diet, precautionary measures may prevent neces-

sity for premature labor.

Urine, value of urea, significance of albuminuria, prevention of eclampsia. Vomiting of pregnancy, when pathological. Preliminary examination, necessity of pelvic mensuration, external palpation, record of cases, vaginal examination.

Physician's armamentarium. Preparation for labor on the part of the patient.

Management of first, second and third stages.

Puerperium.

Discussion to be opened by H. E. Tuley, Louisville, and Jno. G. South, Frankfort.

Essays will also be read at this session by Drs. Speers, Coleman and Wilson, of Louisville. Titles and abstracts received too late for publication.

CONSTITUTION AND BY-LAWS OF THE KENTUCKY STATE MEDICAL ASSOCIATION ADOPTED AT PADUCAH IN 1902 AS AMENDED.

CONSTITUTION.

ARTICLE I.—NAME OF THE ASSOCIATION.

The name and title of this organization shall be the Kentucky State Medical Association.

ARTICLE II.—PURPOSES OF THE ASSOCIATION.

The purpose* of this Association shall be to federate and bring into one compact organization the entire medical profession of the State of Kentucky, and to unite with similar Associations in other States to form the American Medical Association, with a view to the extension of medical knowledge, and to the advancement of medical science; to the elevation of the standard of medical education, and to the enactment and enforcement of just medical laws; to the promotion of friendly intercourse among physicians, and to the guarding and fostering of their material interests; and to the enlightenment and direction of public opinion in regard to the great problems of state medicine, so that the profession shall become more capable and honorable within itself, and more useful to the public in the prevention and cure of disease, and in prolonging and adding comfort to life.

ARTICLE III.—COMPONENT SOCIETIES.

Component Societies shall consist of those county medical societies which hold charters from this Association.

ARTICLE IV.—COMPOSITION OF THE ASSOCIATION.

SECTION 1. This Association shall consist of Members, Delegates and Guests.

SEC. 2. MEMBERS. The members of this Association shall be the members of the component county medical societies.

SEC. 3. DELEGATES. Delegates shall be those members who are elected in accordance with this Constitution and By-Laws to represent their respective component county societies in the House of Delegates of this Association.

SEC. 4. GUESTS. Any distinguished physician not a resident of this State may become a guest during any Annual Session upon invitation of the Association or its Council, and shall be accorded the privilege of participating in all of the scientific work for that Session.

ARTICLE V.—HOUSE OF DELEGATES.

The House of Delegates shall be the legislative and business body of the Association, and shall consist of (1). Delegates elected by the component county societies, and (2), *ex-officio*, the officers of the Association as defined in Article VIII, Section 1, of this Constitution.

ARTICLE VI.—SECTIONS AND DISTRICT SOCIETIES.

The House of Delegates may provide for a division of the scientific work of the Association into appropriate Sections, and for the organization of such Councilor District Societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

ARTICLE VII.—SESSIONS AND MEETINGS.

SECTION 1. The Association shall hold an Annual Session, during which there shall be held daily not less than two General Meetings, which shall be open to all registered members, delegates and guests.

SEC. 2. The time and place for holding each Annual Session shall be fixed by the House of Delegates.

ARTICLE VIII.—OFFICERS.

SECTION 1. The officers of this Association shall be a President, three Vice-Presidents, a Secretary, a Treasurer, and eleven Councilors.

SEC. 2. The President and Vice-Presidents shall be elected for a term of one year. The Secretary, Treasurer and Councilors shall be elected for terms of five years each, the Councilors being divided into classes so that two shall be elected each year. All of these officers shall serve until their successors are elected and installed.

SEC. 3. The officers of the Association shall be elected by the House of Delegates on the morning of the last day of the Annual Session, but no Delegate shall be eligible to any office named in the preceding section, except that of Councilor, and no person shall be elected to any such office who is not in attendance upon that Annual Session and who has not been a member of the Association for the past two years.

ARTICLE IX.—FUNDS AND EXPENSES.

Funds for meeting the expenses of the Association shall be arranged for by the House of Delegates by an equal per capita assessment upon each county society to be fixed by the House of Delegates, by voluntary contribution, and from the profits of its publications. Funds may be appropriated by the House of Delegates to defray the expenses of the Annual Sessions, for publication, and for such other purposes as will promote the welfare of the Association and profession.

ARTICLE X.—REFERENDUM.

The General Meeting of the Association may, by a two-thirds vote, order a general referendum upon any question pending before the House of Delegates, and the House of Delegates may, by a similar vote of its own members, or after a like vote of the General Meeting, submit any such question to the membership of the Association for a final vote; and if the persons voting shall comprise a majority of all the members, a majority of such vote shall determine the question, and be binding upon the House of Delegates.

ARTICLE XI.—THE SEAL.

The Association shall have a common Seal, with power to break, change or renew the same at pleasure.

ARTICLE XII.—AMENDMENTS.

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at that Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been sent officially to each component county society at least two months be-

fore the session at which final action is to be taken.

BY-LAWS.

CHAPTER I.—MEMBERSHIP.

SECTION 1. All members of the Component County Societies shall be privileged to attend all meetings and take part in all of the proceedings of the Annual Sessions, and shall be eligible to any office within the gift of the Association.

SEC. 2. The name of a physician upon the properly certified roster of members, or list of delegates, of a chartered county society which has paid its annual assessment, shall be *prima facie* evidence of his right to register at the annual session in the respective bodies of this Association.

SEC. 3. No person who is under sentence of suspension or expulsion from any component society of this Association, or whose name has been dropped from its roll of members, shall be entitled to any of the rights or benefits of this Association, nor shall he be permitted to take any part in any of its proceedings until such time as he has been relieved of such disability.

SEC. 4. Each member in attendance at the annual session shall enter his name on the registration book, indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of the society, he shall receive a badge which shall be evidence of his right to all the privileges of membership at that session. No member or delegate shall take part in any of the proceedings of an annual session until he has complied with the provisions of this section.

CHAPTER II.—ANNUAL AND SPECIAL SESSIONS OF THE ASSOCIATION.

SECTION 1. The Association shall hold an annual session, meeting in odd years in the city of Louisville, and in even years at some point in the state fixed at the preceding annual session.

SEC. 2. Special sessions of either the Association or House of Delegates shall be called by the President at his discretion or upon petition of twenty delegates.

CHAPTER III.—GENERAL MEETINGS.

SECTION 1. The General Meetings shall include all registered members, delegates and guests, who shall have equal rights to participate in the proceedings and discussions; and, except guests, to vote on pending questions. Each General Meeting shall be presided over by the President, or in his absence or disa-

bility, or by his request, by one of the Vice-Presidents. Before it, at such time and place as may have been arranged, shall be delivered the annual address of the President and the annual orations, and the entire time of the Session so far as may be shall be devoted to papers and discussions relating to scientific medicine.

SEC. 2. The General Meeting shall have authority to create committees or commissions for scientific investigations of special interest and importance to the profession and public, and to receive and dispose of reports of the same; but any expense in connection therewith must first be approved of by the House of Delegates.

SEC. 3. Except by special vote, the order of exercises, papers and discussions as set forth in the official program shall be followed from day to day until it has been completed.

SEC. 4. No address or paper before the Association, except those of the President and Orators, shall occupy more than twenty minutes in its delivery; and no member shall speak longer than five minutes, nor more than once on any subject.

SEC. 5. All papers read before the Society shall be its property. Each paper shall be deposited with the Secretary when read, and if this is not done it shall not be published.

CHAPTER IV.—HOUSE OF DELEGATES.

SECTION 1. The House of Delegates shall meet annually at the time and place of the annual session of the Association, and shall so fix its hours of meeting as not to conflict with the first General Meeting of the Association, or with the meeting held for the address of the President and the annual orations, and so as to give delegates an opportunity to attend the other scientific proceedings and discussions so far as is consistent with their duties. But if the business interests of the Association and profession require, it may meet in advance, or remain in session after the final adjournment of the General Meeting.

SEC. 2. Each component county society shall be entitled to send to the House of Delegates each year one delegate for every 25 members, and one for each major fraction thereof, but each county society holding a charter from this Association, which has made its annual report and paid its assessment as provided in this Constitution and By-Laws, shall be entitled to one delegate. In case the regularly elected delegate is unable to attend the annual meeting of the Association, the President of the county society shall have the power to appoint an alter-

nate, who shall have the rights and privileges of a delegate.

SEC. 3. A majority of the registered delegates shall constitute a quorum, and all of the meetings of the House of Delegates shall be open to members of the Association.

SEC. 4. It shall, through its officers, Advisory Council, and otherwise, give diligent attention to and foster the scientific work and spirit of Association, and shall constantly study and strive to make each annual session a stepping-stone to future ones of higher interest.

SEC. 5. It shall consider and advise as to the material interests of the profession, and of the public in those important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public-health legislation, and to diffuse popular information in relation thereto.

SEC. 6. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality, and shall continue these efforts until every physician in every county of the State who can be made reputable has been brought under medical society influence.

SEC. 7. It shall encourage post-graduate work in medical centers, as well as home study and research, and shall endeavor to have the results of the same utilized and intelligently discussed in the county societies. With these ends in view, five years after the adoption of the By-Laws no voluntary paper shall be placed upon the annual program or be heard in the Association which has not first been read in the county society of which the author is a member.

SEC. 8. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body in such a manner that not more than one-half of the delegates shall be elected in any one year.

SEC. 9. It shall, upon application, provide and issue charters to county societies organized to conform to the spirit of the Constitution and By-Laws.

SEC. 10. In sparsely settled sections it shall have authority to organize the physicians of two or more counties to be designated by hy-

phenating the names of two or more counties so as to distinguish them from district and other classes of societies, and these societies, when organized, and chartered, shall be entitled to all the privileges and representation provided herein for county societies, until such counties may be organized separately.

SEC. 11. It may divide the counties of the State into Councilor Districts, and, when the best interest of the Association and profession will be promoted thereby, organize in each a district medical society, to meet midway between the Annual Sessions of the Association, and members of the chartered county societies, and none others, shall be members in such district societies. When so organized from the presidents of such district societies shall be chosen the Vice-Presidents of this Association, and the presidents of the county societies of the district shall be the vice-presidents of such district societies.

SEC. 12. It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates, and such committees may report to the House of Delegates in person, and may participate in the debate thereon.

SEC. 13. It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective.

SEC. 14. It shall present a summary of its proceedings to the last general meeting of each annual session, and shall publish the same in the Transactions or JOURNAL.

CHAPTER V.—ELECTION OF OFFICERS.

SECTION 1. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect.

SEC. 2. No two candidates for President shall be named from the same county. Any member known to have directly or indirectly solicited votes for or sought any office within the gift of this Association shall be ineligible for any office for two years.

SEC. 3. The election of officers shall be the first order of business of the House of Delegates after the reading of the minutes on the morning of the last day of the General Session.

SEC. 4. Nothing in this article shall be construed to prevent additional nominations being made by members of the House of Delegates.

CHAPTER VI.—DUTIES OF OFFICERS.

SECTION 1. The President shall preside at all meetings of the Association and of the House of Delegates; shall appoint all com-

mittees not otherwise provided for; shall deliver an annual address at such time as may be arranged; shall give a deciding vote in case of a tie, and shall perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the State during his term of office, and, so far as practicable, shall visit, by appointment, the various sections of the State and assist the Councilors in building up the county societies, and in making their work more practical and useful.

SEC. 2. The Vice-Presidents shall assist the President in the discharge of his duties. In the event of his death, resignation or removal, the Council shall select one of the Vice-Presidents to succeed him.

SEC. 3. The Treasurer shall give bond for the trust reposed in him whenever the House of Delegates shall deem it requisite. He shall demand and receive all funds due the Association, together with the bequests and donations. He shall, under the direction of the House of Delegates, sell or lease any estate belonging to the Association, and execute the necessary papers; and shall, in general, subject to such direction, have the care and management of the fiscal affairs of the Association. He shall pay money out of the Treasury only on a written order of the President, countersigned by the Secretary; he shall subject his accounts to such examination as the House of Delegates may order, and he shall annually render an account of his doings and of the state of the funds in his hands.

SEC. 4. The Secretary, acting with the Committee on Scientific Work, shall prepare and issue the programs for and attend all meetings of the Association and of the House of Delegates, and he shall keep minutes of their respective proceedings in separate record books. He shall charge upon his books the assessments against each component county society at the end of the fiscal year; he shall collect and make proper credits for the same, and perform such other duties as may be assigned to him. He shall be custodian of all record books and papers belonging to the Association, except such as properly belong to the Treasurer, and shall keep account of and promptly turn over to the Treasurer all funds of the Association which come into his hands. He shall provide for the registration of the members and delegates at the Annual Sessions. He shall keep a card-index register of all the legal practitioners of the State by counties, noting on each his status in relation to his county society, and upon request shall transmit a copy of this list to the American Medical Association for publica-

tion. In so far as it is in his power he shall use the printed matter, correspondence and influence of his office to aid the Councilors in the organization and improvement of the county societies, and in the extension of the power and usefulness of this Association. He shall conduct the official correspondence, notifying members of meetings, officers of their election, and committees of their appointment and duties. He shall act as Chairman of the Committees on Scientific Work and on Publication. He shall employ such assistants as may be ordered by the Council or the House of Delegates. He shall annually make a report of his doings to the House of Delegates.

In order that the Secretary may be enabled to give that amount of time to his duties which will permit of his becoming proficient, it is desirable that he should receive some compensation. The amount of his salary shall be fixed by the House of Delegates.

CHAPTER VII.—COUNCIL.

SECTION 1. The Council shall hold daily meetings during the annual session of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of three Councilors. It shall meet on the last day of the annual session of the Association for re-organization and for the outlining of work for the ensuing year. At this meeting it shall elect a Chairman and Secretary, and it shall keep a permanent record of its proceedings. It shall, through its Chairman, make an annual report to the House of Delegates at such time as may be provided.

SEC. 2. Each Councilor shall be organizer, peacemaker and censor for his district. He shall visit each county in his district at least once a year for the purpose of organizing component societies where none exist, for inquiring into the condition of the profession, and for improving and increasing the zeal of the county societies and their members. He shall make an annual report of his doings, and of the condition of the profession of each county in his district to each annual session of the House of Delegates. The necessary traveling expenses incurred by such Councilor in the line of the duties herein imposed may be allowed by the House of Delegates upon a proper itemized statement, but this shall not be construed to include his expense in attending the annual session of the Association.

SEC. 3. Collectively the Council shall be the Board of Censors of the Association. It shall consider all questions involving the rights and standing of members, whether in relation to other members, to the component

societies, or to this Association. All questions of an ethical nature brought before the House of Delegates or the General Meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members or of a county society, upon which an appeal is taken from the decision of an individual Councilor. Its decision in all such cases shall be final.

SEC. 4. The Council shall have the right to communicate the views of the profession and of the Association in regard to health, sanitation and other important matters to the public and the lay press. Such communications shall be officially signed by the chairman and secretary of the Council, as such.

CHAPTER VIII.—COMMITTEES.

SECTION 1. The standing committees shall be as follows:

A Committee on Scientific Work.

A Committee on Public Policy and Legislation.

A Committee on Publication.

A Committee on Arrangement, and such other Committees as may be necessary. Such committees shall be elected by the House of Delegates, unless otherwise provided.

SEC. 2. The Committee on Scientific Work shall consist of three members, of which the Secretary shall be a member and Chairman, and shall determine the character and scope of the scientific proceedings of the Association for each session, subject to the instructions of the House of Delegates or of the Association, or to the provisions of the Constitution and By-Laws. Thirty days previous to each annual session it shall prepare and issue a program announcing the order in which papers, discussions and other business shall be presented, which shall be adhered to by the Association as nearly as practicable.

SEC. 3. The Committee on Public Policy and Legislation shall consist of three members and the President and Secretary. Under the direction of the House of Delegates it shall represent the Association in securing and enforcing legislation in the interest of the public health and of scientific medicine. It shall keep in touch with professional and public opinion, shall endeavor to shape legislation so as to secure the best results for the whole people, and shall utilize every organized influence of the profession to promote the general influence in local, state and national affairs and elections. Its work shall be done with the dignity becoming a great profession and with that wisdom which will make effective its work and influence. It

shall have authority to be heard before the entire Association upon questions of great concern at such times as may be arranged during the annual session.

SEC. 4. The Committee on Publication shall consist of three members, of which the Secretary shall be one, and shall have referred to it all reports on scientific subjects and all scientific discussions and papers heard before the Association. It shall be empowered to curtail or abstract papers and discussions, and any paper referred to it which may not be suitable for publication may be returned to the author. All papers read before the Association shall be its property. With the approval of the President of the Association and the Chairman of the Council this Committee shall be vested with authority to arrange for the publication of a journal as the official organ of the Association, which shall be sent without charge to each member.

SEC. 5. The Committee of Arrangements shall consist of the component society in the territory in which the annual session is to be held. It shall, by committees of its own selection, provide suitable accommodations for the meeting-places of the Association and of the House of Delegates, and of their respective committees, and shall have general charge of all the arrangements. Its Chairman shall report an outline of the arrangements to the Secretary for publication in the program, and shall make additional announcements during the session as occasion may require.

CHAPTER IX.—ASSESSMENTS AND EXPENDITURES.

SECTION 1. The assessment of two dollars per capita on the membership of the component societies is hereby made the annual dues of this Association. The Secretary of each county society shall forward its assessment together with its roster of all officers and members, list of delegates, and list of non-affiliated physicians of the county to the Secretary of this Association on the first day of April in each year.

SEC. 2. Any county society which fails to pay its assessment, or make the reports required, on or before the date above stated, shall be held as suspended, and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

SEC. 3. All motions or resolutions appropriating money, shall specify a definite amount, or so much thereof as may be necessary for the purpose indicated, and must

be approved by the Council and House of Delegates on a call of the ayes and no's.

CHAPTER X.—RULES OF CONDUCT.

The principles set forth in the Principles of Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

CHAPTER XI.—RULES OF ORDER.

The deliberations of this Association shall be governed by parliamentary usage as contained in Robert's Rules of Order, unless otherwise determined by a vote of its respective bodies.

CHAPTER XII.—COUNTY SOCIETIES.

SECTION 1. All county societies now in affiliation with the State Association or those that may hereafter be organized in this State, which have adopted principles of organization not in conflict with this Constitution and By-Laws, shall, upon application to the House of Delegates, receive a charter from and become a component part of this Association.

SEC. 2. As rapidly as can be done after the adoption of this Constitution and By-Laws, a medical society shall be organized in every county in the State in which no component society exists, and charters shall be issued thereto.

SEC. 3. Charters shall be issued only upon approval of the House of Delegates and shall be signed by the President and Secretary of this Association. The House of Delegates shall have authority to revoke the charter of any component county society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

SEC. 4. Only one component medical society shall be chartered in any county. Where more than one county society exists, friendly overtures and concessions shall be made, with the aid of the Councilor for the District if necessary, and all of the members brought into one organization. In case of failure to unite, an appeal may be made to the Council, which shall decide what action shall be taken.

SEC. 5. Each county society shall judge of the qualification of its own members, but, as such societies are the only portals to this Association and to the American Medical Association, every reputable and legally registered physician who is practicing, or who will agree to practice, non-sectarian medicine shall be entitled to membership. Before a charter is issued to any county society, full and ample notice and opportunity shall be

given to every such physician in the county to become a member.

SEC. 6. Any physician who may feel aggrieved by the action of the society of his county in refusing him membership, or in suspending or expelling him, shall have the right of appeal to the Council, which, upon a majority, may permit him to become a member of an adjacent county society.

SEC. 7. In hearing appeals the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a Board and as individual councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

SEC. 8. When a member in good standing in a component society moves to another county in this State, his name, upon request, shall be transferred without cost to the roster of the county society into whose jurisdiction he moves.

SEC. 9. A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the society in whose jurisdiction he resides.

SEC. 10. Each county society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material condition of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

SEC. 11. Frequent meetings shall be encouraged, and the most attractive programs arranged that are possible. The younger members shall be especially encouraged to do post-graduate and original research work, and to give the society the first benefit of such labors. Official position and other preferments shall be unstintingly given to such members.

SEC. 12. At the time for the annual election of officers each county society shall elect a delegate or delegates to represent it in the House of Delegates of this Association, in the proportion of one delegate to each twenty-five or major fraction thereof, and the secretary of the society shall send a list of such delegates to the Secretary of this Association, at least ten days before the annual sessions.

SEC. 13. The secretary of each county society shall keep a roster of its members, and a list of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of

graduation, date of license to practice in this State, and such other information as may be deemed necessary. He shall furnish an official report containing such information, upon blanks supplied him for the purpose, to the Secretary of this Association at least 30 days in advance of each annual session, and at the same time that the dues accruing from the annual assessment are sent in. In keeping such roster the Secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

CHAPTER XIII.—AMENDMENTS.

These By-Laws may be amended by any annual session by a two-thirds vote of all the delegates present at that session, after the amendment has laid upon the table for one day.

REPORT OF THE COUNCIL.

To the House of Delegates:

From June 1903 to June 1904, an average monthly edition of 1,000 twenty-four page copies of the *Bulletin* were printed at a cost of \$1,012.80 with a mailing charge of \$343.35, a total cost of \$1,255.15. During that year \$850.31 was received from advertisements, making the *net cost* of the *Bulletin* \$405.84.

From June, 1904 to October, 1905, an average monthly edition of 1500 thirty-two page copies of the *Journal* were printed at a cost of \$1,862.24, with a mailing charge of \$142.27. During that year \$1,184.94 was received from advertisements, making the *net cost* of the *Journal* \$819.57.

From October, 1905, to October, 1906, an average monthly edition of 2000 forty-eight page copies of the *Journal* were printed at a cost of \$1,671.80, with a mailing charge of \$120.96, a total cost of \$1,792.96. During that year \$1,816.51 was received from advertisements, making the *net profit* from the *Journal* \$23.75.

From October, 1906, to October, 1907, an average monthly edition of 2600 eighty page copies of the *Journal* were printed at a cost of \$2,716.25, with a mailing charge of \$89.46, and advertising commissions of \$359.97 were paid, and incidentals amounting to \$71.96, a total cost of \$3,237.64. During this year \$3411.02 has been earned from advertisements, making the *net profit* from the *Journal* \$173.38.

* Of this amount \$2902.12 has been collected and turned into the Treasury on Oct.

1, while \$508.90 represents the uncollected advertising income for the special October edition of ninety-six pages.

At a called meeting of the Council held in Louisville, all the members were present except Drs. Sherrill and Richmond, who were detained by illness. Bids were opened for printing the JOURNAL for twelve months, and it being found that the bid of the Times-Journal Publishing Company, of Bowling Green, Ky., was the lowest and best, it was unanimously directed that a contract be made with this firm, as follows:

CONTRACT FOR PRINTING THE JOURNAL.

This contract made and entered into by the Kentucky State Medical Association, party of the first part, and the Times-Journal Publishing Company, party of the second part, witnesseth:

That the party of the second part hereby agrees to publish for the party of the first part the Kentucky Medical Journal on paper of the quality furnished, the body of the Journal to be printed in 10-point DeVinne type, the discussions and similar matter to be placed in 8-point DeVinne type, not more than one-third of each issue to be advertising matter, set by hand, each month's issue to consist of forty-eight (48) pages, two thousand (2000) copies, in consideration of the sum of one hundred and twenty-five dollars (\$125.00) per month.

It is further agreed that the party of the second part agrees that the JOURNAL shall be mailed to the members before midnight on the twenty-sixth day of the month preceding the issue, subject to a penalty of ten dollars (\$10.00) for each twenty-four hours, or fraction thereof, delay.

It is further agreed that one-third (1-3) of the copy shall be in the hands of the printer on the 1st of each month, one-third (1-3) on the 10th and one-third (1-3) on the 16th.

It is further agreed that the copy shall be correct, and the party of the second part agrees to pay twenty-five cents (25c) for each typographical error not contained in the copy. Galley proofs and page proofs are to be submitted to the editor, and it is agreed that it shall be read and returned within twenty-four hours after its submission.

It is further agreed that for each additional sixteen (16) pages, the party of the first part shall pay forty-one dollars (\$41.00), and for each additional five hundred (500) copies of the JOURNAL they shall pay twenty-five dollars (\$25.00).

It is further agreed that the party of the second part shall furnish envelopes, in care of the JOURNAL, which shall be addressed by the party of the first part, that the JOURNAL shall be put in the envelopes and mailed by the party of the second part.

It is further agreed that this contract is to be continued for twelve (12) months, beginning this December 1, 1906.

Witness our hands and seals this day and date above named,

Kentucky State Medical Association,

By A. T. McCORMACK, Secretary.

Times-Journal Publishing Company,

By W. J. DENHARDT, Manager.

The advertising income of the JOURNAL has been largely increased during the year. While of course, most of this increase has been due to the efforts of our Editor and Business Manager, much of it has been due to the wise action of those of our members who have patronized, as far as possible, those firms which advertise with us. In no case has this approached an objectionable form of boycott, and it is an influence which is susceptible of indefinite increase. When you are shopping while in Louisville ask the storekeepers why they do not advertise in *your JOURNAL*.

During the year more advertising has been rejected than has been accepted. This is because we will not accept advertising of medicinal preparations unless they have been submitted to the Council on Pharmacy and Chemistry, A. M. A. In regard to any special drug firm, if you do not find their advertisements in *your JOURNAL*, you can safely take it for granted that they would not be admitted. In this connection the following resolutions adopted unanimously by the A. M. A., at its last Atlantic City session this year are cordially commended to your favorable consideration:

WHEREAS, The Council on Pharmacy and Chemistry, after examining many hundreds of preparations, has officially announced its approval of a large number of such preparations; and

WHEREAS, We believe that the editors of many medical journals in this country, both official organs of State Associations and privately owned journals, are desirous of co-operating in the work of freeing the medical profession from the nostrum control; therefore, be it

RESOLVED, That this Association most earnestly requests all medical journals to refuse to aid in promoting the sale of preparations which have not been approved by the Council, by refusing advertising space to such preparations; and be it further

RESOLVED, That we most earnestly request the moral and financial support of our members for those medical journals, whether privately owned or controlled by medical organizations which disregard commercialism and stand firm for honesty and right dealing, thus sustaining the Council in its greatest work for the medical profession.

The conduct of our JOURNAL is conclusive evidence that a medical journal can be conducted honestly and profitably at the same time. We respectfully submit that unless they are conducted honestly it is the duty of every member of the profession to decline to be connected with them editorially, financially or as a subscriber.

The reports of the individual Councilors and of our officers are submitted herewith.

- J Garland Sherrill, Chairman,
Louisville.
- W. W. Richmond, Clinton.
- J. W. Ellis, Masonville.
- E. Rau, Bowling Green.
- D. C. Bowen, Elizabethtown.
- R. C. McChord, Lebanon.
- J. C. Wesley, Middleburg.
- J. E. Wells, Cynthiana.
- J. W. Kincaid, Catlettsburg.
- I. A. Shirley, Winchester.
- G. E. Cecil, Flat Lick.

SECRETARY'S REPORT.

Bowling Green, Ky.

To the House of Delegates, Kentucky State Medical Association.

Gentlemen:—

In accordance with your instructions at Owensboro, the resolutions establishing \$5 as the standard fee for medical examinations for life insurance were mailed to every registered physician in Kentucky. The response was practically unanimous. All of our county societies but two endorsed our resolutions.

In addition, at the instance of the Committee on Organization of the American Medical Association, your resolutions were mailed to the officers of every county and state medical society in the United States. During the year more than half of the State Associations endorsed them, and they also met the approval of more than three-fourths of the county medical societies in the Union. In fact, so unanimous has been the action of our profession in this matter that a number of the large companies have restored the standard fee

and others will do so in the near future. It is interesting to note that those traitors to the profession who violated the letter or spirit of your resolutions are being dropped as examiners both by the companies which maintained, and by those which have restored the fee. The New York Life Insurance Company has announced over the signature of one of its numerous high-salaried officials that it will continue to use the graded fee. I recommend the adoption of a resolution requesting the members of our profession throughout the State to decline to recommend, for any position of honor, any doctor who continues to make examinations for this company. It has been suggested also that our members everywhere exert themselves to secure agencies in reputable companies friendly to the profession for those agents who continue to work for such people. It is an especial pleasure to record officially a fact that has given every Kentuckian just cause for pride and that is that every one of our four home companies, the medical directors of which are members of this Association, have maintained the standard fee, and that they also decline to use as examiners members of the profession willing to be exploited by the cut rate companies.

In numbers, our membership continues to show a healthy increase from year to year, as shown by the following table:

1903	..	..	..	..	..	..	1038
1904	..	..	..	..	..	..	1386
1905	..	..	..	..	..	..	1348
1906	..	..	..	..	..	..	1609
1907	..	..	..	..	..	..	1769

In enthusiasm, unity and real work, I am sure we are progressing. About ten societies have already started the post-graduate course. Others are considering it, and, after it has been more fully explained during the session by our Vice-President, J. H. Blackburn, who has been selected by the American Medical Association to prepare and initiate the course for the entire country, I am sure it will become popular in every county.

The membership for the several Councilor Districts for 1905, 1906 and 1907, the increase or decrease during this year from 1906, and the total number of registered physicians in each county and the number not affiliated with our organization, are shown in the following tables:

FIRST DISTRICT.

County	1905	1906	1907	Increase	Decrease	Total Number of Physicians.	Non-Members
Ballard	11	15	23	8		31	8
Caldwell-Lyon . .	16	17	22	5		45	23
Calloway	19	20	20			40	20
Carlisle	15	15	17	2		18	1
Fulton	4	6	14	8		31	17
Graves	18	15	21	6		68	47
Hickman	18	20	18		2	27	9
Livingston		3	1		2	24	23
Marshall	13	13	11		2	20	9
McCracken	43	43	36		7	72	36
Trigg	11	1	10	9		16	6
Total	168	168	193	38	13	392	199

SECOND DISTRICT.

County	1905	1906	1907	Increase	Decrease	Total Number of Physicians.	Non-Members
Breckenridge . .	15	13	14	1		31	17
Crittenden		12	13	1		20	7
Daviess	59	59	65	6		86	21
Hancock		6	4		2	16	12
Henderson	28	32	28		4	67	39
Hopkins	8	19	15		4	65	50
McLean . . . . .	.5 No. report.		10	10		23	13
Muhlenberg . . .	15	18	17		1	38	21
Ohio		12	19	7		48	29
Union	18	29	27		2	39	12
Webster	5	No report.			5	46	46
Total	148	205	212	25	18	479	267

THIRD DISTRICT.

County	1905	1906	1907	Increase	Decrease	Total Number of Physicians.	Non-Members
Allen	10	11	12	1		16	4
Barren	21	23	21		2	38	17
Butler	13	13	15	2		18	3
Christian	24	26	34	8		73	39
Cumberland . . .	13	9	9			16	7
Logan	19	24	26	2		38	12
Metcalfe	11	12	11		1	14	3
Monroe	13	16	17	1		20	3
Simpson	8	14	10		4	20	10
Todd	18	22	21		1	30	9
son							
Warren-Edmon-	39	44	54	10		64	10
Total	189	214	230	24	8	347	217

FOURTH DISTRICT.

County	1905	1906	1907	Increase	Decrease	Total Number of Physicians.	Non-Members
Bullitt	7	17	16		1	19	3
Grayson		24	21		3	30	9
Hardin	17	34	28		6	52	24
Hart	14	14	20	6		24	4
Henry	13	17	20	3		38	18

County	1905	1906	1907	Increase	Decrease	Total Number of Physicians.	Non-Members
Larue	9	7	7			14	7
Meade	10	9	7		2	12	5
Nelson	15	17	21	4		32	11
Olham	11	9	12	3		18	6
Shelby	17	20	18		2	39	21
Total	113	168	168	14	14	278	111

FIFTH DISTRICT.

County	1905	1906	1907	Increase	Decrease	Total Number of Physicians.	Non-Members
Anderson	12	6	13	7		19	6
Boone	11	11	10		1	27	17
Carroll	11	11	12	1		16	4
Franklin	18	18	20	2		37	17
Gallatin	5	No report.			5	10	10
Jefferson	139	179	214	35		628	414
Owen	13	12	11		1	28	17
Spencer	5	No report.				12	12
Trimble	7	7	9	2		11	2
Total	240	249	289	47	7	788	499

SIXTH DISTRICT.

County	1905	1906	1907	Increase	Decrease	Total Number of Physicians.	Non-Members
Adair	4	11	15	4		19	4
Boyle	14	15	15			22	7
Green	7	5	11	6		13	2
Marion	23	22	20		2	23	3
Mercer	13	13	10		3	32	22
Taylor	9	9	8		1	16	8
Washington		18	14		4	21	7
Total	79	93	94	10	10	146	53

SEVENTH DISTRICT.

County	1905	1906	1907	Increase	Decrease	Total Number of Physicians.	Non-Members
Casey	10	15	15			16	1
Clinton		6	9	3		10	1
Gerrard	8	10	9		1	15	6
Lincoln	12	11	16	5		23	7
Pulaski	19	23	28	5		41	13
Rockcastle	10	6	9	3		16	7
Russell		8	8			10	2
Wayne	7	8	10	2		16	6
Total	66	87	104	18	1	147	43

EIGHTH DISTRICT.

County	1905	1906	1907	Increase	Decrease	Total Number of Physicians.	Non-Members
Bourbon	24	24	21		3	36	15
Bracken	4		11	11		22	11
Campbell-Kenton	52	58	65	7		162	97
Fleming	15	13	15	2		29	14
Grant	13	6	12	6		26	14

County	1905	1906	1907	Increase	Decrease	Total Number of Physicians.	Non-Members
Harrison	20	27	28	1		33	5
Jessamine	8	8	11	3		21	10
Mason		15	13		2	38	25
Nicholas	5	14	13		1	22	9
Pendleton	2	12	15	3		25	10
Robertson	3	3	3			8	5
Scott	19	21	18		3	34	16
Woodford	8	2	11	9		26	15
Total	173	203	236	42	9	482	246

NINTH DISTRICT.

County	1905	1906	1907	Increase	Decrease	Total Number of Physicians.	Non-Members
Boyd	18	15	17	2		35	18
Carter—No organization.						27	27
Elliott	3	No report.			3	6	6
Floyd—No organization.						19	19
Greenup—No organization.						18	18
Johnson—No organization.						19	19
Lawrence		3	2		1	26	24
Lewis	3		4	4		16	12
Magoffin—No organization.						6	6
Martin—No organization.						4	4
Pike		5	11	6		21	10
Total	21	11	34	12	4	197	164

TENTH DISTRICT.

County	1905	1906	1907	Increase	Decrease	Total Number of Physicians.	Non-Members
Bath	12	19	16		3	25	9
Breathitt	5	4	5	1		10	5
Clark	14	16	12		4	34	22
Estill	8	9	9			11	2
Fayette	43	42	49	7		110	61
Knott—No organization.						4	4
Lee		5	4		1	10	6
Letcher			3	3		8	5
Madison	20	13	17	4		42	25
Menifee—No organization.						2	2
Montgomery	10	6	6			26	20
Morgan		3	7	4		16	9
Owsley	4	4	5	1		5	
Perry—No organization.						5	5
Powell	10	8	12	4		13	1
Rowan	3	10	10			10	
Wolfe		6	9	3		11	2
Total	129	145	164	28	8	342	178

ELEVENTH DISTRICT.

County	1905	1906	1907	Increase	Decrease	Total Number of Physicians.	Non-Members
Bell	9	10	13	3		25	12
Clay		5	9	4		10	1
Harlan		3	4	1		5	1
Jackson			1	1		9	8

County	1905	1906	1907	Increase	Decrease	Total Number of Physicians.	Non-Members
Knox	12	12	12			19	7
Laurel	8	12	9		3	21	12
Leslie—No organization.						3	3
Whitley	13	12	9		3	44	35
Total	42	54	57	9	6	136	79

It cannot be repeated too often that the actual work done by a county society is in direct proportion to the efficiency of its secretary. Under present conditions he may not show an increase in membership, as the time is rapidly approaching when all the desirable material will be included on our rolls, but he should be continually able to make his programs more attractive, to always have essayists or essays on hand, thereby drawing a regular and increasing attendance, and he should, especially, promptly report full minutes for publication in the JOURNAL. During the coming year the JOURNAL will continue to print all of the articles sent from your county societies. If none are printed from your county it is either because your members will not write them or your secretary will not send them in.

I am happy to inform you that the financial system devised by the Council works simply and admirably. All checks are payable either to the Association or to the JOURNAL. They are entered when received on our cash books, regularly deposited to the proper account and transmitted once each month to the Treasurer. All of our expenses are met by voucher checks which are signed by the President, Secretary and Treasurer. A detailed financial statement is appended to this report. As all of our accounts are paid on the fifth of each month, it will be noted that the incidental items in my office are met by my personal checks and that I have been reimbursed in my monthly check. In each of these instances I have attached my own cancelled personal check to the voucher check of the Association as a double voucher. With the approval of the Council, both the Treasurer's and my books have been audited by the Potter-Matlock Bank and Trust Company and their report is appended. In addition to this audit, I desire to suggest that a committee of five from the House of Delegates be appointed at the first session to go over our books and report any changes in methods which will benefit the business of the Association. During this year, it will be noted that our expense for office equipment has been large, but this equipment is listed as

assets, and is of considerable value. I also recommend that the Secretary be required to give a bond equal to that of the Treasurer, as under our present system, he is equally responsible for the current funds of the Association.

In conclusion, permit me to extend my sincere thanks, not alone to our splendid President and Councilors and other officials, but to the entire membership of the Association, for many kindnesses and much help in your work. In this connection, I feel that it is proper to say that little of the work we have been able to do this year would have been possible had it not been for the fundamental labors of my predecessors Drs. Steele Bailey and J. B. Bullitt, and that the profession of the State cannot do them too much honor nor give them too much credit.

Respectfully submitted,
A. T. McCORMACK,
Secretary.

REPORT OF THE BUSINESS MANAGER OF THE JOURNAL.

Twenty-six pages of the JOURNAL are devoted to advertisements of everything we can get that is useful to the physician. The October issue of the JOURNAL has been increased to 96 pages with 30 pages of advertisements, and 7,000 copies were mailed.

Through a systematic sample-copy system this JOURNAL reaches every one of the 4,000 doctors in Kentucky, one-third of whom receive no other medical journal.

It offers a valuable advertising medium for any firm whose preparations are eligible for its columns.

No medicinal preparation is accepted that does not publish a formula, and to secure its correctness, it must also be approved by the Council on Pharmacy and Chemistry of the American Medical Association.

This method meets the approval of reputable firms, for it is only by this means they can be distinguished from nostrum vendors.

Many well-known firms manufacture preparations that have been approved and taking

this as a drawing-card, float a nostrum on the market, the recent exposure of Somnos and Probilin are examples. This disclosure compels you to rely upon the JOURNAL for the truth and efficacy of preparations that have been placed upon the market.

Some manufacturers after their products have been approved, think that is all that is necessary and refuse to advertise in journals.

As all the income from the advertisers is used to make the JOURNAL better in printing, circulation and scientific work and as each doctor in this Association is personally interested in its welfare and prosperity, naturally he will prefer to use preparations made by firms who advertise in his JOURNAL. When an agent comes to your office representing a publishing house, infant foods or exploiting the superiority of some medicinal preparation, ask him if his firm has an ad. in the JOURNAL. If not, find out why they are not offering their wares through a medium that will help you as well as be advantageous to them.

If he says they do advertise it will be well to refer to the JOURNAL to verify his statement. Tell him you are sure there is some reason why his firm has not taken this matter up, and if he expects to do business with you or in your State, he must help you through your JOURNAL; view his samples with suspicion, for in a majority of cases you will find they have not advertised because their products have been rejected.

This answer can be given to the numerous circulars that flood your office, and to agents who besiege you from every kind of factory, who do not hesitate to offer a formula with every preparation; the more disreputable a firm the more willing are they to furnish a formula that may vary with season, climate and locality.

Because one preparation made by a manufacturer who advertises appears in the JOURNAL, this should not delude you into thinking that every preparation bearing their label is trustworthy or of value.

They advertise in the JOURNAL only those preparations that meet our standards. Almost every day we return checks sent in for advertisements we cannot accept, more than \$4,000 has been offered this year for advertising space in the JOURNAL and has been refused. It is essential for the prosperity of the JOURNAL since we are limited in the space and character of our advertisements that you support our advertisers and specify the products of those manufacturers who have liberally contributed to our advertising columns.

L. H. SOUTH.

SPECIAL REPORT ON THE NEW YORK LIFE AND CUT RATE EXAMINATIONS.

Your committee has had the privilege of reading a copy of the secret bulletin the New York Life Insurance Company has recently sent out to its agents in which the medical fee question is discussed at some length. The statements contained therein are so deliberately misleading that they merit some notice.

In the opening paragraph it is stated that "In 1895 at the time when the New York Life was instituting *important economics* (italics ours), a graded fee schedule for all medical examinations was adopted after a *careful study* of the subject." In the light of the Hughes investigation where it was shown that the company expended more money in political campaign contributions and for such other unwarranted and dishonest purposes, it seems pertinent to ask if the only *important economics* resorted to by this company were not against their faithful medical force, at that time helpless because unorganized, and if the careful study referred to did not end when it was found that in 1895 the medical profession was wholly powerless through lack of that unity it is now attaining.

The historical part of their statement continues that they did not believe it right to burden small policies with so large a fee. It is to be remembered that at the same time this company was paying many of its agents 75% to 90% of the first year's premium on every policy. The company, in the public prints is now boasting that it is saving millions to the policy holders through economies forced on it by the Hughes Committee, public opinion and the State Insurance Commissioners. But it is to be remembered that the same officials that were guilty of all this exposed extravagance are still in the saddle. John A. McCall, far the best of the bad lot, dead, largely because of their desertion, as his son said, is the only one of their old guard who is out. They may be good while under fire, but let observation slacken a little, and another commission is likely to be needed to find a relapse into former methods of gross favoritism and mismanagement. The next paragraph is worth quoting:

"Competitors have repeatedly attacked the company's motive—they say it was an unwise move—a cheap-John proceeding—that it antagonized the medical profession—that as a result of such antagonism the company received inefficient medical service. Such utterances are false. Experience in mortality and expenses proves that our company's

judgment was sound and that the course pursued has been wise."

We do not know what the New York Life's competitors think of this course, but we do charge that the company's motive was a mean and sordid one—that it has proved itself a niggardly and expensive, penny-wise and pound-foolish policy, that it is distinctly antagonistic to every self-respecting member of the medical profession, and that this company does get a notoriously inefficient force and work. Your committee knows, of their personal knowledge that a majority of those this company now has on its lists in Kentucky are notoriously incompetent to make examinations, and, from other companies, that other physicians have always been preferred as examiners than those willing to work for the New York Life.

The next paragraph is startling to the uninitiated, and a joke to the rest:

"Since its adoption in 1895 the New York Life has never departed from this graded fee schedule and has no intention of doing so in the future."

The New York Life has permitted in the past, and now permits its agents, in order to retain a "desirable" examiner to add \$2 to his examinations wherever necessary, to be charged to the company as mileage. This money is paid directly by the company and its result, however intended, is a direct debauchment of the medical force, the only department besides the actuary's left unscathed by the Hughes committee. In many other places the agent is paying the \$2. The only class of its examiners who get only \$3 is that which knows no better, or is so low grade as to be glad to get anything. They next announce that they are gradually adopting a system of salaried examiners which is far cheaper and more efficient than their old plan. *And right here, and in the concluding paragraph, is the crux of the whole matter.* Knowing they are defeated in their effort to secure cheap examiners by the united stand of the profession, and not having the moral courage to acknowledge defeat, they have sought and are now offering salaries to tempt examiners to them. In one town of less than 10,000 people where examinations never cost the New York Life more than \$600 per year, *when they had three agents* producing between three and five hundred thousand annually, this company is now paying an examiner \$360 a year and \$3 more for each examination. One month he says he made two examinations and received \$36! The next month he made three examinations and received \$39. *And this examiner is not get-*

ting half what he could have gotten if he had held out a little longer. This is not an isolated example, but is a general policy being adopted all over the country. This may be economy to the frenzied financiers, but it is a plain waste of policy holders' money in our view. This proposition presents another aspect. This particular examiner had personally and of his own volition signed the following:

WHEREAS, We, as physicians, realizing the responsibility incident to proper examination of the individual, believe such reduction to be unjust; therefore, be it

Resolved, that the County Medical Society, and the medical profession in sympathy with them, in session assembled, do hereby declare such reduction to be unjust, and respectfully suggest that no physician legally authorized to practice medicine in this county accept such reduction in fee; and further, that any physician accepting such reduction be guilty of a breach of professional courtesy.

Resolved, That it is the sense of this Society that hereafter in each examination for life insurance in which urine analysis is required the minimum fee shall be \$5.

II.—That the above rate shall not apply to industrial medical inspections, without urinary analysis, for amounts less than \$1,000.

III.—That no member of this Society enter into any contract or agreement with any corporation, society, association, company or individual, to examine applicants for insurance for any stated salary or lump sum, thereby evading the spirit and instinct of the foregoing resolutions.

IV.—That the payment of all fees shall be authorized by the home office of the society or corporation to which such application is made, and under no circumstances shall an examiner receive or accept any part of this fee from an agent or any other person or corporation, unless the full fee be paid by authority of the home office.

V.—That each member of this Society pledge himself or herself, in case a fellow-member be removed from the position of examiner for any corporation or society solely because of this action of the medical profession, that he or she will not accept an appointment from such corporation or society as examiner, nor make any examination for same in this county.

VI.—That each member of this Society bind himself or herself, by a pledge to be presented by him or her to the Secretary, to abide by these resolutions.

We respectfully submit that a company which employs a man who deliberately, and

for money, breaks a binding contract, such as this one, invites the perfidy it is bound to receive at high prices.

Now a final word of advice to those still examining for the New York Life. If it is your abiding purpose to sell your souls to these men by branding yourselves as "guilty of a breach of professional courtesy" and breaking your pledge, *sell high*. If you are getting fees, you are foolish, for they will give you a salary to keep you, and it is your fault if the salary is not a good one. They have plenty of money, and if you intend deserting your pledges and being a traitor to your profession, *for money*, be sure to get enough to soothe your conscience, for you will need it. Respectfully submitted,

C. Z. AUD, Chairman.

FIRST DISTRICT.

Clinton, Ky.

Kentucky State Medical Association,

GENTLEMEN:—

It is my pleasure to offer the following report for the First Councilor District of the Kentucky State Medical Association for the fiscal year of 1907. I esteem it a pleasure for the reason that, in doing so, I represent eight or ten of the best county medical societies in the State organization. Of the twelve county societies composing this district; namely, Ballard, Carlisle, Hickman, Fulton, Graves, McCracken, Marshall, Calloway, Livingston, Caldwell, Lyon, and Trigg, ten of them are in a high state of organization and doing active work.

The only county of the twelve that is not organized is Livingston. On account of the distance the doctors live from each other, it has been impossible to maintain the organization in that county. In a few of these societies every doctor in the county holds membership; notably, Carlisle and Hickman. In most of the other societies there are a few doctors who are not members, some of them are old and have retired from practice, consequently, take no interest in medical matters; others have been members and have been suspended for non-payment of dues. Still others have never taken enough interest in the organization to become members. This is especially true in Graves, McCracken, and Fulton counties, nevertheless I am to report growth and progress in the First District. The membership has steadily grown each year since its organization and, I think, the final report of the Councilor will establish this fact beyond a doubt. The interest in medical so-

ciety work is increasing. Many of the societies have been doing post-graduate work according to their own ideas, and all of them are anxiously waiting for the adoption of the new plan of "four years' course," formulated and recommended by J. H. Blackburn.

The doctors in the First District, with few exceptions make no examinations for life insurance companies for a fee of less than five dollars, and stand as a unit against unapproved medicine and medical journals that advertise them.

W. W. RICHMOND, Councilor.

SECOND DISTRICT.

Masonville, Ky.

Kentucky State Medical Association.

GENTLEMEN:—

I herewith submit my report as councilor of the Second District, and in so doing will say the results achieved have by no means been satisfactory to your councilor and will doubtless be disappointing to the profession. But when it is remembered that my predecessor was no less a personage than our distinguished president, and that he had by his tact and splendid powers of organization brought nearly every available physician in the district into his county society, it will be apparent that but little was left for his successor to accomplish. Wherever I went I found physicians of the very highest type, cultured and accomplished gentlemen, men who were fully imbued with the responsibilities of their calling and the duties they owed to the communities in which they labored. I found in some places an indifference on the part of some of them that was wholly inexcusable—an apathy that was appalling when it was remembered that these same physicians had when they entered the profession willingly offered themselves to protect weak and suffering humanity from the ravages of time and to strengthen them against the assaults of death.

It is gratifying to be able to say that every county society willingly and enthusiastically endorsed the action of the State Medical Society at its last meeting in passing resolutions condemning the Life Insurance Companies for the insult they had offered the profession by reducing the fees for examination, and pledged themselves to stand firm for a minimum fee of five dollars for every complete examination. Forward along all the lines of reform and advancement seemed to be the motto of physicians everywhere I went, with nowhere any sympathy for pat-

ent medicines and patent medicine advertising.

HOPKINS COUNTY.

On the 15th day of August I visited Hopkins County Medical Society which met at Madisonville. There I met a goodly number of physicians who had not had a society meeting for a year. This to me was inexplicable, for I at once recognized the assemblage of physicians to be one of the finest I had ever met. Every one to a man was an up-to-date man, a body of physicians, who, if they had the inclination, could make their influence for good felt throughout the entire State. It was readily agreed that they would meet regularly hereafter and a date for a future meeting was made. A delegate to the State Medical Society was elected. It was agreed that the social side of medical life in the county would be looked after in the future. Many members were received and I think the future holds in her hands much good for the physicians of Hopkins County.

HANCOCK COUNTY.

On January 5th I visited by appointment, the Hancock County Medical Society, in company with Dr. Griffith, which met at Hawesville. There were some five or six physicians present who reported that the physicians had not been having regular meetings. We urged the importance of closer organization in the county, and those present agreed to meet regularly and try to awaken more interest among its members. A copy of the KENTUCKY STATE MEDICAL JOURNAL was exhibited and the plea made that it was worth many times the amount paid for dues to the State Medical Society.

BRECKENRIDGE COUNTY.

By appointment I visited Breckenridge County and am sorry to say that not one county physician honored me with his presence. Dr. Kincheloe, of Hardinsburg, met me at the depot and escorted me to the hotel where we had dinner, after which I spent a very pleasant hour at the office of Drs. Kincheloe & Kincheloe, father and son, whom I found to be elegant gentlemen and fine physicians, men who were doing all in their power for the advancement of medicine in their county. I called on the physicians of the town and had a pleasant talk with them, urging upon them the importance of society work. Perhaps some influence in the future can bring these county physicians to realize that they are falling by the way-side and that soon, like Othello, their occupation will be gone.

UNION COUNTY.

On the 5th of December I attended a meeting of the Union County Medical Society, which met in Morganfield, and found a genial and hospitable corps of physicians who were working in harmony and with much enthusiasm for the honor and glory of the medical profession. I found every eligible physician in the county a member of his county organization with bare one exception, and that one was on that day by a suspension of all rules elected a regular acting member, and that doctor was a chum of my boyhood days and a life-long friend, Dr. Joseph E. Johnson. He is an ornament and a shining light in the profession of his county. A splendid program was carried out and was participated in by many physicians of the county, as well as by visiting physicians from Henderson, and Dr. McMurtry, of Louisville. The social side of medical life in the county was well prepared for in the way of a splendid banquet, which was doubtless enjoyed by all whose privilege it was to attend. Your humble servant was deprived of the pleasure and honor of attending by obligations elsewhere.

MUHLENBERG COUNTY.

On February 10th by appointment and in company with President Griffith I visited the Muhlenberg County Medical Society, which met in Central City. Arriving there at noon we were met at the train by the physicians of the city and escorted to the hotel where a splendid dinner was awaiting us. The society met in the Odd Fellows' Hall, with physicians representing nearly every section of the county, notwithstanding the horrible condition of the roads. Interesting cases were reported and discussed by many of the physicians. Dr. Griffith made a splendid talk along the lines of organization, which I am sure did much good in awakening a keen and lively interest in medical work in the county. There is a general good feeling among the physicians of the county and a strong society will evidently be developed as the material is good.

DAVIESS COUNTY.

On the 18th day of December I attended the regular quarterly meeting of my own county, and we had, as we always have, a very large attendance, some forty members being present. The physicians of this county are fully awake to the good that grows out of regular society work, both for themselves and the community at large, and make it a point to always be present and by so doing this county has one of the liveliest medical so-

cieties in the State. Every available physician in the county is a member of his county society. Reports and discussions of cases is a permanent feature of the meetings, and much information is thereby disseminated. The social side of medical life is always well provided for and highly enjoyed by all.

McLEAN COUNTY.

On August 8th by appointment Dr. Griffith and myself visited the physicians of McLean County and found that they had no medical organization at all. We met quite a number of physicians from the country districts, who, with the physicians of Calhoun made a well-attended meeting. After a fine talk by Dr. Griffith, a society was organized and officers elected and a date for a future meeting made. Practically every physician of the county became a member and a delegate to the State meeting was chosen. These physicians who are a splendid set of men promised that hereafter they would meet regularly and in every way contribute their part to make up the aggregate of medical life in the State.

WEBSTER COUNTY.

On July 18th I had an appointment to visit Webster County, but the trains failing to make connection at Henderson, was left to spend the day with the Henderson physicians. I got in telephone communication with the secretary of Webster County Medical Society, who told me that no one was present at the appointed time and place, so had I been able to reach my destination I would have been deprived of meeting many physicians of that county. The secretary informed me that there was little interest being manifested by the Webster County physicians in society work, but that he would make a great effort to get them together and notify me when to come. But I have never heard from him since. I spent the day in visiting the physicians of Henderson and found them to be up-to-date men, but they reported that the county physicians were taking but little interest in society work. The city physicians were meeting regularly and doing much good. They said they would do all they could to get their country brethren more interested in the society work. There is a splendid set of physicians in Henderson. Men equal to any to be found anywhere, and it is to be expected that these physicians will soon have one of the best county societies in the State.

Respectfully submitted,

J. W. ELLIS.

Councillor 2nd District.

THIRD DISTRICT.

Bowling Green, Ky.

To the Kentucky State Medical Association,
GENTLEMEN:—

As your councilor of Third District I hand you herewith report of work done for 1907.

The total number of members and non-members is 335. In 1906 the total membership was 212; for 1907 the total membership is 214.

It has been my firm conviction that there would be a much larger increase than is shown.

This has been a year of great importance to the medical profession. A. T. McCormack has labored unceasingly to make the State Medical Journal a source of accurate information on these important questions that have confronted us, as well as the advantage to each member of the medical profession to give his knowledge and influence in their settlement. The great insurance fight which has been won and the proprietary and patent medicine evil to be overcome should suggest to every doctor in Kentucky the necessity of his support. It is opportune that we should stand together, remembering that isolation of thought in our profession is dangerous. On May 24th I addressed a letter to all delinquent and non-members in the district urging the necessity of their co-operation, attributing their negligence more to thoughtlessness than anything else. The following report by counties will better show the condition of each:

ALLEN COUNTY.

In Allen there are 17 physicians. Of this number 12 are members of their county society. Through A. L. Wagoner I was invited to be present at their regular monthly meeting in March, at Scottsville. It is a source of regret to me that I was unable to attend, owing to the inclemency of the weather. The report from the secretary shows that they are thoroughly aware of the importance of medical organization and have been carrying out their regular meetings. They have a gain of one member over 1906, leaving only four in the county not affiliating with their society.

BARREN COUNTY.

In Barren County there are 57 physicians, 22 of whom are members of their county society. Feb. 12th, accompanied by A. T. McCormack I attended the regular monthly meeting at Glasgow. There was a splendid attendance of the members resulting in a

thorough discussion of questions vital to organization. It is evident that while there is good work being done by those in the society, there are a great many out of the society that should be enlisted. Dr. and Mrs. Garnett entertained the society royally at dinner at their beautiful home.

BUTLER COUNTY.

Butler County has 20 physicians, 16 of whom belong to their county society. This is a gain of 3 over 1906. It is evident that they have been doing good work. It was my intention to have met with them at Morgantown at their regular monthly meeting, but was prevented from so doing. They had a good meeting with splendid attendance, with a well-selected program and a free discussion of subjects by those present. I look forward with pleasure to meeting with them next year.

SIMPSON COUNTY.

Simpson County has 21 physicians, 10 of whom are members of their county society. This is a loss of 4 from 1906. On Jan. 4th I attended the regular monthly meeting of the Simpson County Medical Society at Franklin. There was a very small attendance, but due in a measure, I think, to the fact they had not been notified. Those present were interested in the organization and anxious to have a society that would be a credit to Simpson County. It was not so much the members from the country who were absent, but to a great extent those in town. It seems that Drs. Guthrie and Moss have worked zealously to get a good membership, but talked as if the outlook were not too encouraging. I hope that interest may be aroused, and those who had not been active will see the necessity of standing together.

METCALFE COUNTY.

There are 14 physicians in Metcalfe County, 11 being members of the county society. This is one less than for 1906, and I hope he will not hesitate longer to be re-instated. On June 12th, at the invitation of Dr. Bushong, accompanied by J. C. Bateson, of Scranton, Pa., I attended the regular monthly meeting of the Metcalfe County Society at Summer Shade. It has been Dr. Bushong's custom for several years to entertain the members of Cumberland and Monroe county societies at some meeting of Metcalfe County Society during the year. This meeting was well attended, some interesting clinical cases presented and freely discussed. They are well organized in this county, as report shows and several

made application for membership to the A. M. A. through Dr. Bateson, its representative. The hospitality of Dr. and Mrs. Bushong will long be remembered by all those present.

CHRISTIAN COUNTY.

There are 63 physicians in Christian County, 30 members for 1907, a gain of four over 1906. This is some gain over 1906, and next year I hope that the officers and members will make the society meetings of such interest that those not affiliating will apply for membership and use their influence in demonstrating the advantages of unity. Christian County should be among the leaders in membership.

LOGAN COUNTY.

Logan County has 38 physicians, 26 belonging to their county society. This gives them a gain of 2 members over 1906. On May 6th J. H. Blackburn and I attended the regular monthly meeting at Russellville. There was a good attendance, with a splendid program carried out. The papers read were freely and fully discussed by those present. A great deal of interest is manifested in the success of the organization work, and some good discussions followed a talk by Dr. Blackburn on the proprietary and patent medicine evil. Dr. and Mrs. Walter Byrne entertained the society with a delightful dinner at their elegant home where peace and good fellowship reigned.

CUMBERLAND COUNTY.

Cumberland County has 16 physicians, 9 being members of the county society. This is the same number for 1906. I am afraid that interest has flagged and some have been allowed to become luke-warm. In 1905 there was a membership of 14. The meetings should be held regularly and made so entertaining and profitable that those who are not affiliating will see the necessity of doing so. We must at least hold our own, and I am sure Cumberland will at least return to her former standing.

MONROE COUNTY.

In Monroe County there are 22 physicians, 17 of whom are members of their county society. This is a majority of one over 1906. This is a good showing, considering the number of members in the county. I met several of the members at the Metcalfe County meeting, and they report that they have been meeting regularly and doing good work. I am sorry that I was unable to meet with them at one of their monthly meetings.

TODD COUNTY.

Todd County has 29 physicians, 21 belong to their county society. On Dec. 5th, 1906, J. H. Blackburn and myself attended the regular monthly meeting at Elkton. There was a good attendance and some questions of a local nature were brought up and discussed which have since been settled in a satisfactory manner and in the interest of the society. The members were all of one accord on the insurance question and the proprietary and patent medicine evil was brought up and discussed in its many phases. I am sure there is a bright future for this society and know that they are doing good work. It is my intention without fail to visit every county in the Third District during next year. Each member of his county society from the president down should feel a pride in his county doing the best work possible and make every effort to increase the membership. The importance of re-organization becomes more apparent each day and we must not drag.

WARREN-EDMONSON.

There are 67 physicians in Warren-Edmonson counties, 54 being members of their county society. This is a majority of 10 over 1906. The Warren County Society has done good work during the year, having usually good attendance and profitable meetings. A great many questions of importance have come up before the society during the year, and interest manifested in the discussions following them.

I take this opportunity of thanking the members of the medical profession for the courtesy shown me wherever I have visited.

ERNEST RAU,

Councilor Third District.

FOURTH DISTRICT.

Elizabethtown, Ky.

The Kentucky State Medical Association:
Gentlemen:—

I have the honor of submitting the following report for the Fourth District for the Fiscal year of 1907:

Bullitt County has a membership of sixteen and has a good meeting every time the secretary can induce as many as a half dozen to attend. I had the pleasure of meeting twelve members of this society the 18th of November in Shepherdsville. I found that a program and dinner had been previously arranged. They were both well executed. The doctors of this county are young men of vim

and energy, and it is hoped they will spend more of the same in attending their regular meetings in the future.

Accompanied by Dr. O'Connor, of Elizabethtown, we had the honor of meeting fourteen of the Hart County physicians and participating in the discussions of three well prepared papers. The doctors of Munfordsville entertained those present at dinner. The majority of the physicians of this county have passed the meridian, but are setting an excellent example for the younger men in the profession. The present membership is eighteen.

I had a very pleasant meeting with the doctors of Henry County in New Castle, April 29th. This society has some splendid men and a bright future. They have a membership of nineteen.

Hardin has a membership of twenty-eight, and is the largest society in the District. This society is the "Old Reliable," and can be trusted for anything that will be for the betterment of the profession.

Grayson has a good society, and a membership of twenty-one.

LaRue County has the same old membership of seven, and, occasionally, has a call meeting.

Meade County has a society in name only, with a membership of eight. The doctors of this county are a capable lot of good fellows, and, I think, I can promise more harmony and better society work next year.

Nelson County has a membership of twenty-one, and has been the banner society in this District this year, which I attribute to the efficient secretary, H. D. Rodman. Your councilor, accompanied by Dr. Aud, drove to, and returned from, Bardstown, forty-eight miles, to meet with this society March 6th. We found sixteen doctors on hand, with Drs. Gilbert and Abel, of Louisville, as guests. The program was neat, and subjects well selected to suit the season, the discussions intelligent and pointed. A banquet and after-dinner speeches, which were participated in by the County Judge and Presbyterian minister, added to the social feature.

Oldham County has a good society, with a membership of twelve. On account of illness, I am indebted to A. D. Willmoth for so kindly and efficiently filling my appointment with this society in June.

Shelby County has a good society with a membership of eighteen. In company with Dr. Willmoth, we had the pleasure of meeting fourteen members of this society in Shelbyville, December 19th. We had good pa-

pers, good case reports, good discussions, good doctors and a good dinner, which added very much to the social feature.

The insurance question is settled for all time to come in the Fourth District. The majority of the counties in my District are discussing in the interim legislation on Patent, Proprietaries, Pure-Food Laws and the re-filling of Prescriptions of Habit-Producing Drugs and Counter Prescribing, etc.

There are two hundred and eighty-eight doctors in the Fourth District with one hundred and sixty-eight members, leaving one hundred and twenty non-members.

TABULATED REPORT AS FOLLOWS:

	MEMBERS.	
	1906.	1907.
Bullitt County....	17	16
Grayson County	24	21
Hardin County	34	28
Hart County	14	18
Henry County	17	19
LaRue County	7	7
Meade County	9	8
Nelson County	17	21
Oldham County	9	12
Shelby County	20	18
	168	168

D. C. BOWEN,
Councilor Fourth District.

SIXTH DISTRICT.

Lebanon.

Kentucky State Medical Association,

GENTLEMEN:—

All the counties in my Councilor District are organized and in good working condition. In many of the counties there are a number of doctors who have retired from practice on account of age, and in many instances it is impossible to get these men to keep up their membership.

Washington County now has an excellent society of fifteen members. There are five doctors in the county who are not members.

Mercer county has thirty-four doctors. Thirteen are members of the county society, leaving twenty-one non-members.

Boyle County has a society membership of fifteen, with six non-members.

Lincoln County has nine members in its society, and three who are not members.

Green County has twelve doctors, nine of whom are members of the county society and three non-members.

Taylor County has fifteen doctors, eight of whom are members of the county society.

Adair County has nine doctors, four of whom are members of the county society.

Marion County has twenty-three doctors, one having died during the year, and three having moved into the county. Nineteen are members of the county society, and I am assured that two of the remaining four will become members soon.

Thus it will be seen that in my Councilor District there are now one hundred and fifty-eight doctors, ninety-seven of these are members of county societies, leaving sixty non-members.

I would urge the county societies to select for their secretaries the most active man in the profession in their counties.

R. C. M'CHORD,
Councilor Sixth District.

SEVENTH DISTRICT.

Middleburg, Ky.

The Kentucky State Medical Association:

GENTLEMEN:—

Following is Councilor's report for Seventh District for 1907:

On December 19th I visited Lincoln County Medical Society in the office of Dr. Bailey, a goodly number of the doctors of the county being present. After discussing matters pertaining to the good of the society in general, the election of officers was taken up. Elberta Carpenter was elected president. Steele Bailey secretary and E. J. Brown delegate. The entire time of this meeting was given to the business interests of the society and our profession. Lincoln County has twenty-one registered doctors; fifteen of them are members of their county society. The doctors composing this society are, in the main, good men, good doctors, alive to the interest of their society and to our profession in general. The society is doing a good work.

Accompanied by E. J. Brown, I visited the Rockcastle County society on December 20th at Broadhead. Most of the doctors of the county were present. The meeting convened at 4 P. M., and at 8 P. M. adjourned for supper, which was provided by the doctors of Broadhead. At 9 P. M. the meeting was again called to order and continued in session until midnight. This meeting was a very enthusiastic one, and I think resulted in much good to the society. There are fifteen registered doctors in Rockcastle County and ten of them are members of their county society. The time of this meeting was given to the election of officers and the discussion of various subjects pertaining to our work. The

society is doing a good work. S. C. Davis is secretary and he looks after things.

On the 21st of December, in company with E. J. Brown, Steele Bailey and J. G. Carpenter, I visited Garrard County Medical Society at Lancaster. The society met at night in the office of J. B. Kinnaird. All the doctors in Lancaster, and some from the county, were present at this meeting. The meeting was called to order about 7 P. M., adjourned at 9 P. M. and were royally entertained at the hotel by the doctors of Lancaster. We met again at 10 P. M., finished the business of the meeting and adjourned. Garrard County has fourteen doctors; eleven of this number are members of their county society. The Garrard County Society is doing good work.

Casey is my native county; my report of it is short. There are fifteen doctors in Casey County and all of them are members of their society. We meet regularly.

On the morning of August 12th on my way to meet the Clinton County Society, I met a number of the Wayne County doctors in Monticello. As A. W. Cain, my assistant, had visited the Wayne County Society officially on July 4th, we did not hold a formal meeting, but met socially and talked over matters pertaining to our profession generally, and the Wayne County Society especially. This society is in splendid working order and the members are alive to their work. There are thirteen doctors registered in Wayne County, and ten of them are members of their county society.

I visited Clinton County on the night of August 12th, and met a number of the doctors of the county. One or two were sick and not able to attend the meeting, and one or two were away from home, but those in attendance were in a good humor, and, from all I could gather, I believe the Clinton County doctors are alive to the interest of their work and their society: peace and harmony appear to be prevailing. Clinton County has nine doctors and seven of them are members of their county medical society.

Russell County has recently lost two of her pioneer doctors; viz., Drs. Wolford and Hopper, both of Jamestown. Russell county has only ten doctors in the county and eight of them are members of their county society.

I now come to the largest and last of the counties of my District—Pulaski. A. W. Cain, my assistant, has been looking well after Pulaski and her doctors. I recently spent two days and nights in the county hunting

up, and talking to, the non-members and inquiring after the work of the society, etc. Pulaski has a good, strong society; they meet monthly, and, besides, they have their weekly study club in Somerset. They are studying medicine. There are about thirty-one doctors in Pulaski county and twenty-four of them are members of their county society.

Then, to sum up, there are one hundred and twenty-six doctors in the District; one hundred are members of their respective county societies; twenty-six are not. Of these twenty-six, several are very old and have practically retired from practice. Others are farming, or in some other business, but there are a few of the number that should belong to their county society and help in the work.

This District is composed of eight counties, four of them have no railroad. The roads are rough, and a great part of the travel must be made in a carriage, and it makes the work of the Councilor hard. I have met most of the doctors during the year and have written to all of them, to many, more than once. There has been no falling off in membership in any of the counties of the District; some of them have the same number they had last year, and some have made slight gain. There has been a gain of about ten in the District. This appears small, but I have done what I could.

Respectfully submitted,

J. T. WESLEY,

Councilor Seventh District.

EIGHTH DISTRICT.

Cynthiana, Ky.

Kentucky State Medical Association,

GENTLEMEN:—

I have the honor to submit herewith the report of the Eighth Councilor District, which is composed of 482 physicians, 217 of these are members of their county societies, leaving 265 non-members.

Bourbon County has a membership of 22, leaving 14 non-members.

In Bracken County there are 9 members, and 13 non-members.

Campbell-Kenton has a membership of 65, with 97 non-members.

Fleming County has 29 doctors, 12 of whom are members of the county society.

In Grant County there are 26 physicians with a county society membership of 12.

Harrison County has a membership of 28, leaving 5 non-members.

Jessamine County has 21 physicians, 11 of this number belonging to the county society.

In Mason County there are 13 members, and 25 non-members.

Nicholas County has 22 doctors in the county, one having died and three moved into the county. There are 13 members of the county society, and I feel sure that 2 of the 9 remaining non-members will soon join the society.

Pendleton County has a membership of 15, leaving 10 non-members.

At the last report Robertson had 11 doctors in the county, only three of whom claimed membership in the society.

Scott County has 34 physicians, 18 of whom belong to the county society.

I had the pleasure of meeting with the doctors of Woodford County. Up to date they have not reported, and I am not informed as to the exact number of members, but there are 26 excellent physicians in the county, and I feel sure they will be able to accomplish great good for our honorable profession.

Very respectfully,

J. E. WELLS, Councilor.

TENTH DISTRICT.

Winchester, Ky.

Kentucky State Medical Association.

GENTLEMEN:—

The Tenth District to the front as usual. After the pace had been set the first year of organization, it was thought that the best we could ever hope for from this end of the line had been accomplished, and that to hold what we had would be good indeed. But this has been surpassed each succeeding year and now in the good year of 1907 we find ourselves far ahead of where we were at the close of the first year. And with the mountains on fire and the blue grass ablaze with enthusiasm we are determined to place our banner higher and higher till every mother's son of us is enrolled to fight vigorously and unceasingly the battle of onward and upward, to a full and complete enjoyment of all that is great and grand in the profession of medicine. It

is painfully true, we regret to say, that in both the blue grass and the honey suckle sections of our district there are yet to be found some who in spite of the prayers and entreaties of the faithful, some hard heads, some fellows who are contrary for contrariness' sake and who will not "jine" the band. It may be that we should not be too hard on these chaps, for it was just born "in em." We hope that before they are called to cross the dark and silent river and apply for entrance into the good doctors' heaven reserved for the faithful and true of our number, that they will see to their everlasting shame their mistake, for surely in their present plight they would hear the unwelcome denunciation—"depart from the goodly heritage prepared for the doctors who on earth were members of their county and State societies." I am free to say, however, that this particular class of "undesirable" citizens is confined largely to the blue grass portion of the tenth councilor district, and in this lovely country is to be found most of the envy, malice and other "Tom Foolery" of the entire profession. But we are preparing to correct this as fast as we can by moral suasion; if this proves ineffectual we will chase them to the mountains and then have them shot. With a few exceptions the societies show increased work and earnestness each succeeding year. The secretaries being in the main good men are producing marked results. Without a sincere and hustling secretary no society can succeed; see to it, then, we pray you that you have efficient men for this important office. As the societies have done some excellent work the visits of the Councilor have been most unimportant and a mere recreation at the expense of the Association. We were honored and greatly profited soon after the Owensboro meeting last fall by a visit from our honored President at the meeting of the Kentucky Valley Medical Association at Campton. His presence, as well as his kindly and fatherly advice enthused us and to this we attribute much of the success that a reference to figures will show. His handsome and attractive personality as well as the before-mentioned qualities are freely talked of in the mountains to this good day. The ladies said—"what a pity he is married."

Bath shows up well; they are enthusiasts and all-around good fellows and a comparison with any previous year will show up favorably when the figures are scanned.

Breathitt is all right and shows increasing interest by a look at what they have done this year.

Clark, I must confess is about the worst

of the lot. A hustling, competent secretary and some of the most enthusiastic physicians to be found on the face of the globe; has at the same time some of the cussedest, self-opinionated and all-around contrary sticks-in-the-mud to be found this side of the cold north pole or the opposite, hottest place described by writers of ancient or modern history. They won't so much as talk organization or permit it to be talked to them. I consider them hopeless unless Gabriel gives them time to repent after blowing his horn.

Estill is still in line and is doing good work with her fighting clothes on.

Fayette, while doing remarkably well with some valiant soldiers, could by a big hump and a hum altogether, do more as she has an abundance of material. Lee is with us and determined to fight the common enemy of organization with vim.

Madison redeemed herself this year from her position low down in the class of 1906 and shows up with her armor on and an increased number on the firing line.

Menifee, poor little thing, cares for nobody but self and neither of her three physicians respond to any petitions to come "with us."

Morgan is to the front as she never was before, increased in numbers and determination to push forward, and we expect greater things of her in 1908.

Montgomery I believe in my soul is the worst of the lot—worse even than my own wretched county of Clark; she has fewer members to her number of efficient, up-to-date doctors than any member of our family. We hope that she will try to do better, which is all that is necessary.

Owsley, that precious boon to an anxious Councilor; over there they have a secret oath that is as unchangeable as the laws of the Medes and Persians, that no doctor can live in their midst who is not a member of the county and State body. For several years they have had four members, all they had, and this year they dug up another and now number five. If we could only exhibit this faithful little band to some other part of the territory it would make somebody ashamed.

Powell, Rowan and Wolfe tell the same story; all are on fire with enthusiasm and show up with an increased army of dandy soldiers. Head us if you can during 1908 is their banter.

Generous A. T. McCormack, assisted by Brother Cecil of the Councilor family did me a dirty trick by transferring Letcher, Perry and Knott to my already overcrowded district. Good men, doubtless, are to be found

in these counties, but their inaccessibility is the trouble. Letcher, I am happy to say, now has three members, something she never had before. We hope this is but a starter, and that it may leaven the whole lump in the three counties. Watch the bulletin for next year for every county in the entire seventeen.

The K. V. M. A. notwithstanding the terrible calamity of losing both president and secretary in one year, is doing a great work in our midst.

County	1906	1907
Bath	19	16
Breathitt	4	5
Clark	16	12
Estill	9	9
Fayette	42	49
Knott—No organization.		
Lee	5	4
Letcher		3
Madison	13	17
Menifee—No organization.		
Montgomery	6	6
Morgan	3	7
Owsley	4	5
Perry—No organization.		
Powell	8	12
Rowan	10	8
Wolfe	6	9
Total	145	162

ELEVENTH DISTRICT.

The Kentucky State Medical Association:

GENTLEMEN:—

I regret that my report is a meagre one. The roads in my district are bad when there are any and there are few doctors in most counties. Many of these lead isolated lives as far as professional associations are concerned, and, of course, it is more difficult to convince these men of the good to be derived from organization. Once aroused, however, they are powers for good, and they are well worthy of every attention being paid them. In each county there are a few energetic, enthusiastic workers, and as our wonderful mineral wealth is developed, new towns and new doctors will spring up, and this faithful old guard will then be able to show what they can do.

In Bell, Clay and Harlan counties there has been a good increase in interest and numbers. Harlan has every doctor in the county in her society. Knox and Whitley hold their own with last year. The Knox Society is an

excellent one, and there are a few good physicians on the outside who should become good workers. The situation in Whitley County is unfortunate. There are no better physicians in the State as individuals, but they have little idea of professional unity. When they do realize the bad effects of personal jealousy, as I am sure they will, and come together in regular meetings and find out that each of them is as good and honest and worthy as the other, they will regret the numerous opportunities for good they have missed. Some of their number are willing and will continue to work, and I trust these will eventually gather the outsiders to them.

Below is a list of the counties in my district showing the increase and decrease in membership in each county for the past three years, the last two of which I have been Councilor.

County	1905.	1906.	1907.
Bell	9	10	13
Clay		5	9
Harlan		3	4
Jackson			1
Knox	12	12	12
Laurel	8	12	10
Leslie			1
Whitley	13	12	12

G. E. CECIL.

Councilor Eleventh District.

WHAT SHOULD BE THE RELATIONS OF PHARMACISTS AND PHYSICIANS.*

BY J. N. McCORMACK, M. D., LL.D., BOWLING GREEN, KY.

Hailing from the State which gave Lawrence Smith, Shaffer and Deihl to the pharmaceutical world I feel it to be a distinguished honor to present myself as a fraternal delegate to this, the leading pharmaceutical organization in this country, from the American Medical Association, and to be the bearer to you of its most cordial greetings. But this does not include all of my mission; I am here in a dual capacity, with duties more important and delicate, as I understand them, than the pleasant and more or less perfunctory ones of a mere fraternal delegate. I am here by special invitation of your Secretary to explain and give the reasons for certain criticisms of your fraternity embraced in my official report to our Association at its recent meeting in Atlantic City. In other words, as

he so kindly and courteously expressed it, "For a heart to heart talk over matters of great interest to both vocations" upon the subjects indicated in the above talk.

In accepting this invitation I decided to do so in the spirit in which it was offered and to talk, and to ask you to talk in return frankly and fearlessly of flagrant evils which have grown up in and between our profession to such an extent as not only seriously threaten our relations with each other, but to greatly endanger the well-being of the people. The proper performance of the responsible task I have set for myself requires a little personal history, in which I am sure you will indulge me. For twenty-nine years I have been a member, and for twenty-four years secretary and executive officer, of the State Board of Health, which is also the State Board of Medical Examiners, of Kentucky. During all of these years I have had direct charge of all health and medical legislation in the State, spending much of the time embraced in each session of the general assembly at the Capital. For the past seven years I have been chairman of the committee on organization of the American Medical Association, and in that capacity have gone from State to State, and in many of them, from county to county, until almost the entire Union has been covered, discussing with medical and lay audiences questions involved in the great reforms upon which my profession has so earnestly entered. In the course of this work I have visited many State capitals and had opportunity to address a number of legislatures in the interest of these reforms. As a part of this work I have made a careful study of the relations and feelings of the physicians and pharmacists toward each other in every section of the country, and have noted the marked change in these relations in many sections in recent years. I spent several months of last year in a similar study in some of the European countries, and it was in the light of the last observation and experience that I reported to my Association the conclusions and opinions upon one phase of the subject only which attracted the attention of your officers and gives me the opportunity to be with you.

In this connection, speaking of that class of the proprietary people and their allies who are "undesirable citizens," and their adroit crusade against the wonderful drug reform to which the medical profession and country have been awakened, largely through lay efforts, I said,

* Read before the American Pharmaceutical Association, New York, September, 1907.

"While these misrepresentations have done so little harm with the membership, I am convinced that they have kept many from joining the societies and have crippled our usefulness in many other ways. As one evidence of this they have arrayed the retail druggists against us almost solidly in most States. At every capital visited I have found a strong force of drug men working under the direction of expert lobbyists representing the National Association of Retail Druggists, backed by the proprietary interests, against the legislation proposed by the profession in the interest of pure food and drugs, with all of their expenses borne by that body. In every instance an attempt was being systematically and often successfully made to confuse the minds of legislators by the introduction of decoy bills prepared by their central bureau, but cunningly altered as to wording in the various States to hide their common origin. It was found in every instance that legislators were also literally inundated by letters and telegrams from their drug and newspaper constituents in the interest of these now fully exposed and recognized frauds. As a real friend of the pharmacists, one who has always been wedded to the prescription method of dispensing, the discovery of this almost universal ascendancy of the quack interests over this trade was a painful one. It evidently means that we have come to the parting of the ways with the druggists, and must arrange to dispense for ourselves, as is being done in other countries, unless prompt steps are taken in a comprehensive way to restore proper relations with them."

The above was by no means intended to apply to all pharmacists. A respectable minority was found in all of the States who could not be enlisted under the banner of Colonel Duple and other peripatetic philanthropists, or induced to join their efforts to debauch and mislead legislators. You will note also that I hold a large element of our own press and people responsible for many of these abuses. This will be duly enlarged upon and emphasized later on in justice to all concerned. While these criticisms probably do not apply to any member of your great Association, they form a very small part of what must be said if the whole truth is to be told about the methods of the rank and file of the drug

trade over this country. As a part of their regular every day business druggists of the class of which I am speaking sell to innocent men and women, and even for helpless children, who are trying to obtain relief from disease, habit producing liquors and drugs which they cannot but know will work a ruin compared with which death would be a mercy. For the benefit of those who have been made habitues by the small and insidious doses so persistently urged as harmless before legislative committees and elsewhere, whiskey cures composed chiefly of whiskey and morphine cures almost wholly of morphine, and other things equally nefarious, known as such to all except to those who will not see and hear, are advertised daily in the small and often in the large cities all over the country over the personal guarantee and assurance of cure of those purporting to be reputable pharmacists. As an evidence of the results of this business, which is impossible without the complicity of druggists, on a recent visit to the State Inebriate Asylum of Iowa I was informed that the official records of that institution showed that over 75 per cent. of all who had ever been treated there owed their condition to these habit producing nostrums, in many instances the particular one bringing about their downfall being named. If time permitted, similar testimony might be furnished from other institutions, and almost without limit from the experience of private practitioners, especially of the debauchment of unsuspecting women and children from this cause.

Aside from the victims of this infamy there are three factors now fully recognized as essential to its continued existence. These are, the proprietor or manufacturer, the public and religious press as advertising mediums, and the drug trade. It could not thrive for six months without the complicity of all three of these agencies. And yet, so fully has the commercial idea, the lust for wealth without regard for the methods necessary to obtain it, taken possession of our people, a large majority of the personnel of these three classes is made up of men occupying the most exalted positions in the business, social and religious world. Now, I am one of the old fashioned men who believe that ill-gotten wealth is always a curse, that "Whatsoever a man soweth, that shall he also reap," and that this is especially true of druggists in connection with this business. Only one of the many instances within my own knowledge to prove this will be given. Of two personal friends of the highest character and standing, who enjoyed a large trade in this line and became wealthy,

one buried his wife and the other two accomplished sons respectively as morphine, whiskey and cocaine victims. In another connection, I shall attempt to show that of the three classes named your people profit least by the notorious business, and that the legitimate drug trade would be far better off financially without it, but what I am trying now to convince you is that the whole thing is morally wrong and that, profit or no profit, you cannot afford longer to permit the great vocation you so ably represent to be a party to it, or to stand arrayed against legitimate legislation for the mitigation of this evil.

For lack of time I shall only say upon the general subject of counter-prescribing that, while it is under the condemnation of both professions as indefensible, I find it distinctly embraced in the teaching course and examinations of some of your leading pharmaceutical colleges for the past year. It is my intention, however, to deal frankly with one phase of this question which, properly understood, is of almost national importance. I refer, of course, to the treatment of venereal diseases, "The Great Black Plague," by druggists and their boy clerks. Gonorrhoea, especially, is now recognized as one of our most important and, if neglected or improperly treated at the outset, one of the most incurable of diseases, and yet my investigations convince me that in most sections of the country in from 50 to 75 per cent. of these cases the primary treatment is taken in drug stores at the hands of those who would not seriously pretend to have any training or qualification for a work which often taxes the highest capacity of the specialist. Often this gravest of diseases is made a matter of sport, and the young man, having faith in what has been done for him, but usually dangerous as long as he lives, marries and immediately infects some trusting, pure woman. As to the importance of all this, it is only necessary to say that it is estimated by our best surgeons that between 50 and 75 per cent. of the operative work done for women in this country every year is due to this disease and my investigations show that very much of this can be traced to this phase of the drug store practice. I am discussing this subject frankly before medical and mixed lay audiences every day, always giving the druggists an opportunity to respond, and I am insisting that this practice shall be broken up regardless of how they may feel about the other reforms proposed. Of the evils of substitution and kindred matters I may have your permission to speak at another time.

This is only one side of the shield. The other relates to the sins of omission and com-

mission of the medical profession in this connection, and it is not a pleasant picture. Druggists tell me in many sections that they do not get a "square deal" from their physicians and the complaint is often confirmed by my inquiries. This is partially due to the gradual drifting apart and co-incident misunderstanding of the two vocations to which I shall refer later on, and still more to the loose and hazy teaching of pharmacology and therapeutics in most of our medical schools before the recent awakening. In consequence of this lack of training a large element of our profession became easy marks for the pleasant and plausible detail men and, through their joint efforts, the shelves of the druggists and the stomachs of the patients were overloaded with preparations which recent developments have shown to be not only of doubtful, but often of harmful composition. In the same way, and from the same causes, many physicians became dispensers of pills, triturates and other preparations of doubtful composition, short in weight, and otherwise so defective as to be of little or no therapeutic value, or to be entirely misleading. Probilin, coming to us with a foreign mark, but unknown in the country of its nativity, approved and exploited by one of our leading firms of manufacturing chemists, which was so recently exposed by the Council on Pharmacy, is only one of many instances which might be cited in this connection. In the name of honesty and decency in medical and pharmaceutical practice, and still more in the interest of afflicted humanity, for whose benefit we all exist, I insist that the continuance of such evils as I have referred to in both professions and all similar ones should be made impossible.

For I contend that we, and especially the leaders of our organizations, are wholly responsible wherever quackery, incompetency or other frauds or impositions exist in either vocation as the medical and pharmacy laws upon the statute books of every state were put there largely by our professions respectively. Unfortunately the people have taken only too little interest in either their enactment or enforcement. If they are so defective as to protect neither the health and lives of the people or our good names, it was because we did not possess the knowledge which would enable us to draw them correctly or because we were unable to secure such concert of action as would secure their passage as drawn and their enforcement afterwards. And there has been a sad lack of co-ordination between the States as to all of this legislation. There should be model bills drawn by some central body covering the several phases of the work

in the true scientific as distinguished from an improper commercial spirit, which could be easily adapted to the condition and needs of any State. No less important, the public sentiment should be developed and fostered which would make the laws effective when passed.

In our profession we are making rapid advances in all of these matters. Starting seven years ago with a most pleasant system to look upon, but which was practically like creation at its dawn, "without form or void," we have built up probably the most coherent, powerful, harmonious medical organization which has ever existed. We have local societies in over 2,400 of the 2,830 counties in the United States, with a total membership which has grown from about 16,000 to over 70,000. Small legislative, really representative and deliberative bodies look after all matters at the State and National meetings in a way and to an extent which was never possible before. While material interests are not neglected, I am proud to be able to say that the true scientific spirit and the welfare of the people predominate in everything. As one of the results in the way of legislation, in almost every state graduation from a recognized medical college and an examination are required of every one desiring to enter upon the practice of medicine, as should be the case in pharmacy. A medical degree has not meant all that it should in the past, but this is also being reached. Within the past two years our Council on Education, the members of which are serving on it as a labor of love, has officially visited, inspected and reported upon the teaching facilities, equipment and methods of every medical school in this country. Such a report from such a source means that it is only a question of a little time until no diploma will be recognized as a basis for examination in any State which is not issued from a school maintaining a uniformly recognized standard. Of the work of the Council on Pharmacy, most of the members of which are distinguished members of this body, likewise serving gratuitously, it is not necessary that I should say much in their presence. Recognizing that the results of its labors are of incalculable value to honest medicine and pharmacy, the Council, and our great JOURNAL, which is its mouth-piece, have back of them our solid profession, as we believe is justly due to both the Council and the Bulletin of this Association not only from you, but from all reputable pharmacists.

Much as has been accomplished, we recognize not only that our work is in its infancy, but that the results of much of it must be very imperfect or long delayed unless we can

secure the loyal, cordial co-operation of the rank and file of your people. In the light of what has already been said, we also feel that a stage has been reached in our relations which will not be much longer endured by either side, and that we should at least try soon to reach an understanding if we are not to drift as entirely apart as has occurred in other countries. I earnestly believe that we can and ought to get together. Along all the lines I am discussing, from my standpoint, there is little room for difference of opinion. As to them we both exist primarily for a common, altruistic purpose, the relief of suffering humanity, and only secondarily for our own benefit. As is true of all the other learned professions, usefulness, honors, even a modest support may be ours, but legitimately followed, they are not gainful pursuits. If there be those who have entered our ranks with great fortunes as their incentives they cannot make their exit too soon for their own purposes or for the sake of our good name. It is this class, with the mercenary rather than scientific and humanitarian instincts, physicians and pharmacists only in name, who head our great quack institutions, and your great nostrum enterprises, and the medical journals which thrive by exploiting the latter. With the proper conception of duty the time has come when no physician can afford to prescribe and no pharmacists can afford to dispense any preparation of which he does not know the composition and purity. This means that we must get back to the Pharmacopeia and National Formulary and have at least as much care of what we furnish for the sick as the soldier does for the condition of his ammunition, and that each prescription is to be adapted to the individual case. This does not in the least interfere with the use of preparations of known composition and value, proprietary or otherwise, which can be better made in large quantities, but it will put an end for ever to all secret nostrums, whether simply valueless, misleading or dangerous. Not only are we urging this kind of instruction upon our schools for the benefit of the future physician, but we are making it a prominent feature of the post-graduate course which is being put before every county society in the United States.

I feel sure that no argument is required to induce such a membership as yours to appreciate such a work, but I am here to plead with you to do much more than this—to take an active, aggressive, a leading part in it. I believe that there should be such an effective alliance, offensive and defensive, between this organization and the American Medical As-

sociation as will insure only pure drugs for the sick people of this country. This would require joint action, thorough committees and otherwise, in framing, passing and enforcing the necessary legislation, and, in what is even more important, as a necessary premise for all of this, such a campaign of education systematically conducted over the entire country as will give the professional and public sentiment, without which, all legislation is almost worse than useless. Aside from the moral wrong involved in the nostrum business, about which enough has been said, it should be urged upon the rank and file of the drug trade that it has only enriched the manufacturer, and has always been an unprofitable curse to most of them. Thanks to Collier's, Mr. Bok and Everybody's the more intelligent portion of the public and a most important element of the lay and religious press are already with us, we have about finished our contest with the venal and misled medical press, and the time is most auspicious for the inauguration of such a campaign.

I am by no means sure that I am saying all of this in the best way. I fully appreciate the difficulties of my position, especially in that I have so little information as to the personal view-point of your members as to these matters. However faulty may be my presentation of the subject, and the plainness and bluntness of my speaking, I beg to assure you of the kindness of my intentions, and of the earnestness of the desire of those I represent to be in such harmony with you that we may work in hearty co-operation. We want you to help us make the Council on Pharmacy and Chemistry, and the Section of Pharmacology and Therapeutics of the American Medical Association, or some other agencies of this kind, centers in and around which the two professions may gather for these purposes. At best the task will not be an easy one. Nearly everything worth doing in this world is difficult. The interests against which we will contend are strongly entrenched, they have great wealth, and experience has shown that they are little troubled with scruples. Still, the spirit of reform is abroad in the land, and our cause is so just and the evils so easily exposed that, with two such professions as ours organized as they should, and their hands joined in the work, the final result could not be a matter of doubt.

"TREATMENT OF ACUTE DIFFUSE PERITONITIS.*

BY A. DAVID WILLMOTH, LOUISVILLE.

There is perhaps no question in modern surgery of greater interest and importance, and about which there has been greater disagreement, and from which the mortality is higher than in acute diffuse peritonitis.

The extremely high mortality made the subject of such vital importance that it was one of the six subjects that was considered by the International Society of Surgery at its first Triennial Congress held at Brussels in September of last year, in which five hundred of the most prominent surgeons of the world were present.

Frederich of Leipzig, who opened the discussion, called attention to the fact that peritonitis is not one disease but many, or what is perhaps more properly speaking a serious complication, and too often a terminal event of many widely differing pathological conditions, many of which in themselves are not dangerous to life, others are, if unrelieved necessarily fatal, examples of which are seen almost every day by the abdominal surgeon in inflammations of the vermiform appendix on one hand and intestinal obstruction on the other.

The gross causes of peritonitis are therefore many and their prompt and appropriate treatment in very many cases prevents the onset of, or arrest at a very early stage the peritonitis which otherwise threatens the patient's life.

In order to obtain a thorough knowledge of this subject we must first have thoroughly fixed in our minds, the means by which the peritoneum may become infected, and how it cares for it when it becomes infected. The first may be summed up as follows: First the most common cause of peritonitis is undoubtedly the extension of the trouble from conditions arising about the vermiform appendix. In the majority of these cases the trouble is limited by adhesions, while in others, perforations are followed by such a violent inflammation that the whole peritoneum becomes involved. (2) The most common cause is the perforation of a gastric or duodenal ulcer, or perforation following the many other cases that all are familiar with such as rupture of a cyst, or abscess. (3) By the passage of the micro-organism from an inflamed but not perforated hollow viscus, cyst or abscess. (4) By the indirect infection of the blood extravasated into the peri-

* Read before the Muldraugh Hill Medical Society, January, 1907.

toneal cavity in too great a quantity to be disposed of by the natural absorptive agency of the peritoneum. (5) By infection by the way of the blood stream as in septicæmic peritonitis.

The absence of this fibrinous deposit in rapid cases of infection such as those by the streptococcus, denotes the absence of an important barrier to general infection by the way of the blood stream; and the fatality of these cases, as is well known, is disproportionately great.

While the mechanical protection offered by the fibrinous deposit cannot be doubted, there is still another possibility that this secretion poured out by the omental vessels has some antitoxic action, for while germs are not always destroyed they are certainly known to become less virulent.

In order that we may fully understand the method of treatment outlined, it is necessary that we study for a few moments the functions of the omentum. It is known to possess at least five important functions: (1) circulation, (2) absorption, (3) cohesive and adhesive properties, (4) protective role, (5) supplemental function.

In the study of these five great functions and the application of the treatment of this fatal disease, we recognize the first or that of circulation as being the one of greatest importance, as all the rest depend more or less on this one for their effect.

Physiologists teach the importance of correlation between the intra-peritoneal circulation and external conditions. Necessity demands for relief of external tension, that some part of the circulation be capable of storing up blood. This the intra-abdominal vessels are alone capable of doing safely, being aided by the sensitiveness of the splanchnics to reflex irritation.

The omentum with its loose tissue and numerous vessels plays an important part, for it is through this great vascular system that the second function, in conjunction with the lymphatics, is carried on.

This absorption is not only of fluid, but insolubles. Muscatello and Salzel believe that the solid particles are carried by the wandering cell to the lymph stream, and the fluids largely by the blood.

It is generally believed that whatever absorption cannot take place by the lymphatic channel will be done by means of the blood stream, if the endothelium is damaged, hence the importance of preserving this delicate membrane, thereby preventing a general infection by the vascular route. The cohesive and adhesive tendencies of the omentum are

properties peculiar to itself, and explain to the abdominal surgeon how Nature saves many a life. The property of cohesion is first evidenced in foetal life, when the mesogastrium unites with the mesocolon either through degeneration and absorption of the endothelium or more likely a retrograde metamorphosis of endothelial into connective tissue corpuscles.

In advanced life the same tendency is noticed when the omentum becomes incarcerated in a hernia.

The adhesive tendency is probably a result of an exudate on to its superficial structures or white blood cells and fibrin which produce a stickiness. This leads the omentum to become attached to the offending portion and encapsulate it, and thus closes many apertures in the abdomen where the omentum has been forced by the intra-abdominal pressure. A thorough knowledge of the above bacteriological and anatomical facts are necessary in order to understand the disease and to apply the rational treatment. It was the knowledge obtained by the study of these facts that led Murphy and others to completely revolutionize the treatment of this dreadful malady.

While these are important for us to know there is still a far more important point for us to consider, viz: the nature of the infection, what are the micro-organisms that are responsible for the peritonitis arising from the several causes, what is their relative frequency, and how may they be scientifically dealt with.

It stands to reason that if we can demonstrate a number of bacteria to be at different times, and from various sources, the cause of peritonitis, and can recognize that a given case is due to the presence of one or the other of these organisms, either by the symptoms, by the conditions observed at operation, or by rapid bacteriological methods, we are certainly in a much better condition to treat the peritonitis and to give a prognosis after dealing with the source of infection. None have done more along this important line of research than Dudgeon and Sargent, whom I shall quote freely. An examination of the literature can well be said to have been in a complete confusion but by their patient work the following important facts have been demonstrated, first that peritonitis from its several causes is due to the following organisms named in order of their frequency: *Staphylococcus albus*, and the colon bacillus, after these may be placed the *streptococcus pyogenes*, *baecillus pyocyaneus*,

pneumococcus, gonococcus, and rarely the staphylococcus aureus.

They have also disproved the theory, (for it was only a theory) that the pyogenic organisms were the commonest causes of peritonitis.

While they place the staphylococcus albus at the head of the list it was the organism most frequently found in the peritoneal cavity. It appears however to exercise an influence that is the reverse of harmful, for it undoubtedly provokes the appearance of an exudate containing vast numbers of phagocytic cells, and it is upon the presence of these cells and their power of dealing with the organisms that the chances of recovery depend.

The colon bacillus in one or other of its varieties is the commonest causative agent of peritonitis and may exhibit a degree of virulence second only to the streptococcus pyogenes.

The type of peritonitis to which it gives rise varies according to many factors.

The one of greatest moment, however, is the degree of virulence while another that can not be placed far behind in importance, is the time which the peritoneum has had to bring into play, its natural protective mechanisms. An unprepared peritoneum which has suddenly launched upon it, an especially virulent form of infection is much more likely to end fatally than if there had been previously, a slight or so-called chronic inflammation, for while it is true that an uninjured endothelium can and will dispose of bacteria and other foreign substances (within limits of course) by the lymphatic route through the crura and central tendon of the diaphragm, the patient's safety fortunately however does not depend solely upon the integrity of the endothelium, for there is also in most cases a protective fibrinous deposit, gross or microscopical, which limits absorption into the peritoneal blood vessels and at the same time prevents the further egress from the lumen of the intestines.

Those who have practiced medicine for the past score of years have seen the domain of surgery constantly enlarging with a corresponding restriction of the field of purely medical treatment. In most cases, however, it will appear upon investigation that surgery has not supplanted medicine in cases in which the latter was therapeutically effective, but in only those diseases in which it offered but faint hope of a cure.

In no condition has this been more marked than in the treatment of peritonitis. The hesitancy with which the surgeon invaded the peritoneal cavity twenty years ago is

more than equalled by the readiness with which he explores, repairs, and removes therefrom diseased and offending structures at the present time. The peritoneum is no longer a forbidden ground. Aseptic surgery and improvement of surgical technique have done so much in the successful prevention and treatment of peritonitis that a discussion of the medical treatment should and will be limited in the future to a discussion of such treatment as applied to non-surgical forms of the disease and such types, as while amenable to surgery in their inception, have progressed beyond that point.

Even in these cases medicine offers so little in an effective way that the physician frequently permits the surgeon to explore the case hoping that after all it may be a type amenable to surgical treatment.

Previous to the year 1900 surgical treatment of acute diffuse peritonitis was attended by such a high mortality that the results obtained neither tended to establish it as the method of choice or to furnish an agreeable retrospect to those of us who now "know better."

It was no wonder they were viewed with dismay by the surgeon when the mortality rate approached nearly a hundred per cent.

A more thorough knowledge of the condition both from an etiological and bacteriological standpoint demanded that the patient be given a chance for his life, a chance which surgery alone could offer, and the necessary knowledge for the proper application for such means of relief were acquired very slowly and at tremendous cost.

Actuated by a stern sense of duty, regardless of consequences to himself or to his professional reputation, the surgeon operated on such cases as were not actually moribund, employing the methods which at that particular time were accepted as correct, and was then compelled in most cases to watch the steady and relentless progress of the disease to a fatal termination. During this period of discouraging experiences, the surgeon gladly welcomed and adopted any suggestion as to the management of the cases which offered the slightest benefit in the hands of trained operators. A long road was travelled and the stops were many between a complete evisceration and merely opening up the cavity as is done to-day.

The surgical world was startled by Geo. R. Fowler of Brooklyn, in 1900, when he reported a series of nine cases all of which recovered, and described his postural post-operative treatment. No one had ever before been able to report such a series of cases, in

fact it may well be doubted whether any one man up to this time had so many recoveries.

This report came with such telling force that the vista suddenly opened up before us seemed too good to be true. Knowing as we did the physiology of the peritoneum and that absorption took place more rapidly in the diaphragmatic region and diminished as we approached the pelvis where a very slow absorption took place, it is indeed a wonder that some one prior to this had not suggested the elevation of the head and trunk, thereby draining the high and extremely dangerous part of the cavity, with its numerous mouths hungry for septic material, into the lower and safer area, where absorption through lymph channels will take place no faster than the escape of poisons through a well placed drain.

There are at least two points that have contributed so much to the success in the treatment of this dreadful disease and upon which all are practically agreed, viz.; free drainage and the Fowler position.

While it is true that the methods of drainage differ somewhat, all use it and place it in the pelvis and other regions as indicated.

Some days ago while in Chicago I was very agreeably surprised to hear Dr. Murphy state that in his last thirty-six cases of suppurative peritonitis he had only one death and that from double pneumonia and that occurred six days after the operation.

He went so far as to state that he believed that if he could see the cases early he could save every one. His method consists of nothing new, only an assembly of the good things to do and an elimination of the harmful ones.

To be very brief it could be classed under four heads as follows: Tube drainage in pelvis, Fowler position, proctolysis, and anti-streptococcus serum, but a full exposition of his treatment is as follows: First, simple incision with simple drainage placed in pelvis and such other fossae as seem to require it. Perforation should be closed and the appendix removed if it be the offender, provided these things can be done without too much handling of the viscera.

The mere making of the incision and relieving of the tension no doubt in many cases works to a great advantage for it is a well known fact that this limits absorption and also decreases virulency of certain forms of infection. (2) Drainage by a tube of the lowest portion of the pelvis through a suprapubic opening and free drainage through the operative incision with a drainage so arranged and the patient placed in a Fowler position, the fluids in the peritoneal cavity will

gravitate toward the pelvis, and the action of the diaphragm during respiration will help to pump the fluids in that direction.

If there is sufficient fluid in the pelvis to fill the tube each movement of the diaphragm will pump a certain amount of it out which will be absorbed in the dressings. It must be remembered that it is not the quantity of the fluid that is so harmful but rather the extent of the peritoneal surface which comes in contact with it. A quart of pus in a round cavity will be less dangerous than an ounce thinly coated over the peritoneal surface.

Another advantage in this line of treatment is the short anesthesia required, thereby decreasing the chances of shock and vomiting after operation. The question of shock is an especially important one in these cases for it is well known that patients with acute diffuse peritonitis stand long operations badly and short operations well.

Murphy's method of introducing large quantities of saline solution into the rectum is novel. He inserts a nozzle containing three or four openings into the anus to which is attached a rubber tube leading to a bag.

This bag is filled with water and elevated just high enough to make the solution flow into the bowel, the idea being to allow it to flow only as fast as it is absorbed in the bowel. The object of having several openings in the tube is to allow the gas to pass out at one opening while the water is flowing at others, and if it is decided to stop the flow of water the tube is disconnected from the nozzle thereby preventing the irritation that would be caused by the frequent introduction of the tube each time.

By this method large quantities of water (four to eight gallons) will be absorbed within the first few hours after the operation.

This absorption does two things: (1) It converts the peritoneal cavity from an absorbing surface to a secretive one, and the fluid poured out by the lymphatic mouths runs over the surface and into the pelvis and out at the site of the drainage carrying with it the infection.

(2), The large amount of fluid in the body stimulates the heart and kidneys and increases largely the amount of urine passed and in this way removes large amounts of infection.

By stopping the food the peristalsis is stopped and by doing this the dissemination of the poison is prevented.

In those cases the result of streptococci infection the anti-streptococci serum should be used, but the indiscriminate use of anti-toxic

sera without regard to the bacteriology of the case is to be deprecated as being useless as it is unscientific.

As most cases are the result as above stated to be caused by the colon bacillus then a multivalent anti-bacillus coli serum should be tried, such a serum can be had at the present time from a London house but is not perfect as it should be.

Enterotomy or enterostomy in some cases are beyond doubt called for to relieve the gut of its contents that will later be absorbed if not relieved.

I have treated two cases by the method advised within the past month both following appendicitis, one in a girl that recovered, the other in a young man that was practically moribund at the time of the operation, and only operated on at his most urgent request, this case died about twelve hours after operation.

BIBLIOGRAPHY.

1. Vonbergman System of Surgery, Vol. 4.
2. Abdominal operations, Moynihan.
3. Practical medical series, Vol. II, 1906.
4. Progressive medicine, June, 1906.
5. Annals of Surgery, August, 1906.
6. Annals of Surgery, February, 1906.
7. Annals of Surgery, November, 1906.
8. Annals of Surgery, July, 1905.
9. Boston Medical and Surgical Journal, March, 1906.
10. The Physician and Surgeon, 1906. March number.
11. Annals of Gynaecology and Pediatrics, April, 1906.
12. Annals of Gynaecology and Pediatrics, July, 1906.
13. Medical Record, June, 1906.

CASE OF UNUNITED FRACTURE.*

M. E., male, white, occupation—a carpenter, age 27 and married. Family history negative. Personal history rather good, having had typhoid fever and ordinary diseases of childhood during that period. Health since childhood good with no history of syphilis.

March 23rd of present year patient sustained severe injuries, by being caught in revolving shaft (going at rate of 160 revolutions per minute), carrying him around many times, each time striking him with great force against a wall close by and the ceiling.

Patient was rendered unconscious, which lasted several days, as injury was followed by concussion of brain, which extended over a period of two weeks. There was no external evidence of head injury other than two very "black" eyes and great deal of subconjunc-

tival extravasation of blood. Patient also sustained a fracture of the femur and of the seventh rib, the latter healing promptly. The femur was fractured at junction of upper and middle third, the line of fracture being oblique from before backward. Lower fragment was displaced backward and upward while upper fragment pierced the rectus muscle and was immediately under the skin, soft parts seemingly very much injured. I saw patient immediately after injury and applied a plaster of Paris dressing to leg from foot to chest, previously placing adhesive plaster strips so as to make use of Buck's extension if needed. It was badly needed as patient proved to be a very unmanageable one for two or three weeks, not being fully conscious at any time within two weeks after injury. The plaster cast was repeatedly changed as required and Buck's extension also used for four weeks when the extension was left off and plaster and sand bags used. Examination at this time (end of fourth week) revealed satisfactory callus, formation was not firm, but seemed to indicate favorable union. There was no deformity at this time and fragments were apparently in excellent position with less than one inch shortening. Four weeks more of fixation with plaster cast was continued and callus formation was still soft and flexible. At this time daily manipulation, and massage of muscles with more or less rubbing of the ends of the fragments together was begun and kept up for eight weeks. At sixteen weeks there was no more union than there was at four as seat of fracture gave the appearance of a false joint. Operation of "wiring" was advised and performed. Operation consisted of cutting down at seat of fracture, sawing off one-half inch of roughened ends from each fragment and uniting of fragments with three sutures of No. 4 chromic catgut. (I might state here that between the ends of bone fragments was interposed a small strip of fibrous tissue, though small, it may have been the cause of non-union) Limb after operation was put up in a substantial cast from foot to ribs as formerly. Patient did not do well, though external wound healed by primary union, patient began to run a temperature after the first week, and finally it became necessary to open up incision and drain and later make counter opening on dorsal side of limb for better drainage. At this time patient's general condition became very discouraging, he was anemic, and very much emaciated with loss of appetite, insomnia and very melancholy, being a man naturally of a despondent disposition. It now became imperative to

* Name of author was not sent with this case report.

get patient out of bed and improve this run-down condition, so a Thomas steel splint was fitted to him and he was moved to a roller chair and given daily airings outside in the shade. Patient being poor could not afford some of the newer ambulatory splints which are very expensive. Plan proved beneficial from the first as patient's appetite improved, color brightened and he gained in weight and altogether improved considerably. Fracture at present seems to be firmly united and patient can move it, though there is some deformity and nearly three inches shortening. Chief points in case causing delay in union:

1. Ribs united very promptly.
2. Symptoms of concussion lasted nearly three weeks.
3. Though healthy at time of injury he was not robust, and complained of over-work.
4. Low vitality and melancholic temperament of patient.
5. Intervention of soft tissue between ends of fragments.

I can't designate one of the above causes as *the cause*, and am inclined to believe that it was the combination of the five cited causes.

INSANITY WITH A SPECIAL VIEW TO DIAGNOSIS.*

BY G. M. CHINN, FRANKFORT.

The late Professor Gilman said that the best definition he had been able to make of insanity is that it is disease of the brain by which the freedom of the will is impaired. Sometimes there is disease of some of the organs or other parts of the body with no actual disease of the brain, but a sympathetic condition exists. The brain, which some suppose is the souls' frail dwelling place, is the home of the mind. In the gray matter ideas are generated and transmitted through the medium of the nervous system as messages, to all organs or parts of the system for their well being and proper performance of function. There is also a theory that minds communicate, other than through the medium of the nervous system, in a way similar to wireless telegraphy and that impressions thus communicated are good or bad, according to the will power of the dominant intellect. When the mind becomes deranged, change occurs in the character and action of the person, thus making a difference in the actions of a sane and insane person.

A sane person will entertain delusions, but has the power to refer the matter to the mind and have it corrected. Insane persons entertain delusions, but are unable to refer them to the mind for correction, they have lost control of their passions and actions, so they are unable to refrain from the one or abstain from the other, in order to resist the impulse to passion, reason must impart its counsel. The insane person argues from a false premise and firmly believes his delusions to be facts, in spite of such reason as will convince a sane mind that they are errors. In giving the diagnosis of insanity, along which lines it has been suggested that this paper shall principally be guided. I have selected Esquirol's classification which is based on symptoms. Esquirol, a very eminent French alienist was about the first to promulgate an intelligent classification, and though old and somewhat criticised by more modern specialists, they all admit that it is good and largely follow it in their classifications.

First is "*mania*—derangement of the mind with respect to any number of objects and is accompanied by excitement.

"*Monomania*—derangement of the mind with respect to one or a small number of objects with a gay and expansive passion." Monomaniacs are happy in all their delusions.

"*Melancholia*—derangement of the mind with respect to one or a small number of objects with the predominance of sorrowful and depressing passion."

"*Dementia* in which the insensate utter folly for the reason that they are incapable of giving connectiveness to ideas."

"*Idiosy* in which the original confirmation of the head and brain is such that the person cannot give connection to ideas. The difference between an idiot and a demented person is that a demented person once possessed a mind, while the idiot was born without. It has been demonstrated that feeble-mindedness is several degrees above idiocy, and they can be taught to read and write and given a trade by which this class of citizens are made useful (whereas they were formerly regarded as hopeless and helpless), thus making glad the hearts of their parents, guardians and friends. There are a number of subdivisions of these classifications, a few of which I will mention. "*Dipsomania*, an irresistible desire to use stimulants." There is this difference between a drunkard and a dipsomaniac or inebriate:—the drunkard uses stimulants because he likes the taste and ef-

* Read by N. M. Garrett, before the Franklin County Medical Society, May, 1907.

fect, and is perfectly aware of what he is doing and unfortunately too often, though not always, makes no effort to quit. The dipsomaniacs or inebriate uses stimulants because they are incapable of resisting, though they deplore it more than do their friends. It has fallen to my lot to treat many such persons and I now fail to recall a case of recovery. "Pyromania, an irresistible desire to burn and destroy with fire." "Kleptomania, in which the person has an irresistible desire to take things, often for which they have no use. I have been told that merchants in cities employ detectives especially to watch such persons, and if the party is caught, if not known or responsible they are either arrested, or the things taken from them; if known and responsible the articles are charged to the head of the family, who generally knows of the existence of this infirmity and without objection promptly makes payment. "Love. The best definition of this felicitous faculty occurs in the Bible, John 1:4-8, God is love." Another beautiful definition occurs in Shakespeare's "As You Like It." It is in a conversation between Sylvius and Phoebe, in which Phoebe asks, "Good Shepherd, tell this youth what 'tis to love." His answer, "It is to be all made of fantasy. All made of passion and all made of wishes, all adoration, duty and observance, all humbleness, all patience and impatience, all purity, all trial and all obedience."

The insane conditions by which love is affected are: — Erotomania and satyriasis. "Erotomania is accompanied by excitement and involves the most chaste passions with no disposition to transgress the bounds of propriety. Satyriasis represents the lowest or most beastly passions. The best definition I know for these extremes, occurs in the conversation between the Ghost of the late King of Denmark, who was murdered while asleep in his orchard by his wife and brother and in this conversation with Hamlet his son, the Ghost told how he loved and trusted his wife when alive, and tells how his brother, an incestuous and adulterous beast, won to his shameless lust the will of his seeming beautiful and virtuous queen. He gives this definition of his impression of the two extremes of pure and holy love which he had reason to suppose existed during life, and the horrible condition discovered after death. "Virtue as it never will be moved, though lewdness court it in the shape of Heaven; so lust, though to a radiant angel linked, will sate itself in a celestial bed and prey on garb-age."

There is a difference in an act of violence

committed by a sane person under the influence of sudden heat and passion and one committed by an insane person. In case of a sane person an effort will be made to try to evade the penalty of the law, if the person thinks the act was not seen, it may be denied in toto.; if seen, self defense or some other plausible reason in which there is apparent safety will be given. The insane person will not deny the act, but will calmly admit it, and contribute it to some extraneous influence over which there was no control and firmly believe the delusions to be facts.

Eccentricity is sometimes mistaken for insanity, though widely different from mental aberration, the line of demarcation is so ill defined, that an intelligent distinction is difficult, though differing in many respects from other sane minds. The eccentric person i. e., a certain class, often lives in advance of the age. Make and talk of wonderful discoveries, which causes their neighbors to look upon them with suspicion. Prof. Morse, discoverer of telegraphy, before he demonstrated his wonderful discovery as a fact, was regarded as eccentric and some friends were so uncharitable as to suspect him of insanity. They are broad-minded and very tenacious of their opinions. There is another class of eccentrics that jump from one wild theory to another without becoming discouraged when they fail to materialize. "They listen with credulity to the whisperings of fancy, pursue with eagerness the phantoms of hope and believe that to-morrow will perform all the promises of to-day." A splendid type of this eccentricity is the character of Col. Mulberry Sellers, in the "Guilded Age" by Mark Twain, and Charles Dudley Warner. I have in my mind's eye a man, an educated gentleman, a brilliant conversationalist, who occasionally indulges in fancies. A mutual friend met him horse back one day and asked what business he was engaged in now. "I am selling Bibles and whiskey. See these saddlebags? Bibles in one pocket, whiskey samples in the other. I meet and talk with a business man; find out he is a Christian I talk Bibles, and if a man of the world I talk whiskey. This is a unique scheme, it is bound to be a money winner."

In writing this paper I make no claim for being an expert, but have done so with the hope of inducing physicians to post themselves with regard to insanity. We see cases in a general practice, are sometimes called upon to testify as to the mental condition of persons brought before the courts with a view to sending them to an asylum for treatment and occasionally in contested will cases. I

am indebted for and have used suggestions from the Bible, from the writings of several eminent alienists and a few distinguished non-professional authors.

"MEASLES IN PREGNANCY, WITH REPORT OF CASE.*

BY HUGH D. RODMAN, BARDSTOWN.

Owing to the recent and extensive epidemic of measles through which we are passing, and to the fact that measles, during the period of gestation, has been considered very dangerous since measles was first recognized as a distinct disease in the year 900, I have decided to call your attention in a short paper to this complication of an important period of woman's life, viz.: the period of pregnancy.

As an undisputed fact, all high temperature diseases during gestation, are alike dangerous to both mother and foetus, when a physician passes his pregnant patient through an attack of typhoid fever, malarial fever, pneumonia, scarlet fever, small pox, measles, or any of these high fever disorders he is to be congratulated.

Measles in the adult is one of the highest temperature diseases I have ever seen. The highest temperature I have ever recorded was in an adult patient with measles being 108. Following very closely after this high fever period we are, in a large per cent. of our cases, likely to have an abortion, or the expulsion of a dead foetus, at whatever period of gestation it occurs, followed in a few days by the addition of sepsis and death of the mother. From observation* it is found that a larger per cent. of deaths during this period of a woman's life, occur during measles, or just thereafter, than from any other of this class of diseases. The pregnant woman, as you all know, is of course as liable to contract disease as she is in the non-pregnant state, and that pregnancy may occur in women who are already the subject of disease. It is certain that some diseases are but little modified by pregnancy, and vice versa, that pregnancy is not disturbed by some diseases, but there is so much yet to be learned on this subject that it is too extensive to enter into here.

All of the eruptive fevers have generally very serious consequences during this period, proportionate of course to the severity of the attack.

De-Tourcoing states that out of fifteen cases the mothers aborted in seven, these all

having severe attacks. Some cases are recorded in which the child is born with the measles eruption on it.

Playfairs' experience is not so serious; he says that measles, unless very severe, often runs its course without seriously affecting the mother or child, having himself seen several examples of this.

Williams, in his work on obstetrics, 1904, says: "Measles is not a frequent complication of pregnancy, but when it occurs is very prone to cause premature delivery, which was observed by Klotz in nine out of eleven cases. It is stated that intra-uterine transmission of the disease to the foetus is now and again noted, Lomér, and others having reported cases in which the child presented a characteristic eruption at birth."

From the foregoing we readily see that when our pregnant patients are attacked with measles, or is just recovering therefrom, we should be prepared with all the means at our hands to check hemorrhage, as we well know that this disease predisposes to bleeding.

On May 10th. I was called to see Mrs. H. M, age 28, mother of three children, and was then looking for her fourth labor. The oldest of her children had been attacked with measles on April 24th, and was now up and around; the other two were now in bed well broken out, and the mother was in bed with the usual precursory signs of measles, temperature, 102.5, and great nervous excitement. I did what I could to quiet her anxiety, but told her plainly that I thought by the next day she would see the measles, which she did. She was greatly excited, in fact almost crazy about her condition. Having myself never seen a case of this character before, and owing to her extreme nervous excitability, and her great anxiety as to results, I became very anxious about her safety and that of her unborn child; so anxious was I that I looked up everything on the subject at my command, and consulted two or three of my neighbors, to whom I am thankful for advice, and got all the information possible on the subject, at the same time doing all that I safely could to quiet her extreme anxiety, and giving her all of the assurance possible that she would probably pass safely through both troubles, which she did. Having recovered from the measles in good time with no complication, and on the 28th delivered her of a large well-developed, hearty boy, and both mother and boy are doing well, with yet no evidence of measles in the youngster. Gentlemen is this boy now immune or not? Is it not possible that during the ma-

* Read before the Nelson County Medical Society, June 5, 1907.

ternal attack that he too would be immunized. Such cases, in my judgment, should be reported and recorded, so that we may learn the effect of such diseases on the unborn.

CONCUSSION OF THE BRAIN, WITH REPORT OF A CASE.*

BY H. C. JASPER, RICHMOND

The subject, that I have selected for discussion, is one that I consider of great importance to the Railway Surgeons.

1. That it is not infrequent.

2. That in enveloping as cranial bones do the great nerve centers, any traumatism of sufficient violence to produce a solution of continuity of structure in these bones, must necessarily produce a light degree of concussion followed by cerebritis, meningitis, or possibly a mastoiditis as to its location and the extent, to say nothing of compression and laceration of the brain structure itself, and the gravity of the situation depend much more on the amount of injury done to the brain tissue than to the bony structure.

As the chief object of this paper is to report a case I shall not take up in an elaborate way the differential diagnosis between compression, concussion, contusion, but will endeavor to bring out some of the important symptoms, which are necessary to decide whether a case is one for surgical interference or one to be left to the ice bag, cathartics and the reparative process of nature. Mental symptoms are naturally the most prominent evidence of disturbance of the organ which is the seat of the intellectual faculties and in all the inter-cranial injuries some disturbance of consciousness is to be expected, not necessarily a coma but a milder degree of insensibility with stupor and delirium. The patient resents being disturbed, becomes resistant and irritable. Most characteristic state being that of semi-coma, stupor, delirium, muttering, hallucinations, delirium with screaming and at times becoming violent, headaches are complained of, vertigo and vomiting are among the early characteristics and symptoms, sudden desire to get out of bed and rush from the room. These symptoms are often conspicuous of patients that are fairly clear at times. They are illustrative of the changibility in symptoms of brain injury. However from unconsciousness alone, it is impossible to determine that there has been gross structural lesions of the brain. Deepening coma is always of a grave significance. The circulation is usually slow

running from 40 to 80 per minute and varying often between 40 and 80.

Saeg of New York, in the Boston Journal of Medical Surgery of Feb. 15th, says: "It is important to decide if your brain has or has not been injured tangibly. If injured whether the site of the injury is on or near the surface. In short whether or not it is accessible. If inaccessible simple trephining may be resorted to provided there are increasing symptoms of intra-cranial pressure, which can not be relieved by lumbar puncture or milder means. Even if accessible it is best to adopt a conservative attitude. Hemorrhages are often absorbed and many inflammatory processes recede more or less spontaneously. He also considers disturbances of cardiac or respiratory actions of vesical and rectal control and conditions of consciousness as most important symptoms and are manifestations of increasing intra-cranial pressure and other serious injuries. If symptoms point to focal lesions surgical measures should be adopted provided lesion is accessible. The case, that I wish to report, Mr. S., age 22, brakeman jumped from top of box car running at the rate of 20 miles per hour, (because the trucks came from under front end of car), lighting on his head, a rail striking him across the middle and upper portion of the frontal bone producing extensive contusion and ecchymosis. The patient was brought to the hospital about 11:30 A. M., vomited twice on his way. I found a slight cut on left side of chin sufficient to accommodate two stitches. I was preparing to leave the city for three or four days at the time and hurriedly stitched up his chin and put him to bed with pulse 72, asking one of our resident physicians to look after him. His mental condition at that time seemed fairly clear as he answered with a reasonable degree of intelligence the questions asked him. On my return four days later I was informed by the nurse in charge, that my man was doing very well but was "bug house." I had his head shaved and could see that the contusion and swelling in front had left to a very great extent. He had vomited once after being put to bed, pulse part of his head. I found on closer examination a deep-seated doughy condition in the scalp over the right parietal bone, sensitive on pressure, and when the patient was asked where his head hurt him, he always put his hand over this spot which he frequently complained of. No ecchymosis, no scar, no break in the skin. The chart showed that he had vomited one after being put to bed pulse ranging from 46 to 60, temperature 97 to

* Read before the 1906 meeting of the Kentucky State Association of R. R. Surgeons, Richmond.

99 3-5 and at time very restless and noisy. For the next 5 or 6 days his circulation ranged from 56 to 82 and varying many times frequently from 56 to 82, temperature 97 3-5 to 100 respiration from 23 to 24. At times very noisy and boisterous. On several occasions had to be tied to the bed. In the meantime had been given two or three cathartic doses of calomel followed by castor oil and ice cap applied to the head, bromides and occasional small dose morphia hypodermically. At the end of this time, about 11 or 12 days, all swelling and inflammation had left the seat of the injury and I could say with a degree of safety that there was no fracture or depression of the skull at this point. The same condition still existing in the back part of the head as described without a change either to the sensitiveness or pain at this point. The patient was given an anaesthetic and with the assistance of your Vice President the tissue was laid open transversely over this point and dissected back down to the skull. On close examination I found a small crevice or break in the bone 3-4 inch in length extending from within 3-4 of an inch from the sagittal suture to the right and 1½ inches above occipito-parietal suture. I applied the trephine over lapping and taking in a good portion of this break boring down and taking out chips to the dura mater which I found intact and seemingly undisturbed. The wound was dressed antiseptically and the patient put to bed. The following day made very little change in his condition except that he was more quiet. He slept soundly the second night and on the morning of the third day was perfectly clear and conscious and asked the nurse what had happened, when she entered the room, and why his head was tied up, showing plainly the condition known as retrograde amnesia. He did not even remember of going out on the train that morning he was injured. I believe this fracture on the back portion of the head was caused from the blow in front being an indirect fracture or fracture *per contre coup*. Going back to Old Errichson, whose days of usefulness and extensive experience antedate our war on sepsis, he says, "that these fractures though by no means common, do exist and every hospital surgeon of much experience must have seen unequivocal instances of it. The mistake made in this case although (Sacs says conservative methods should be adopted) was that on third or fourth day if the patient's mind did not clear up he should have been anesthetized and the skull cut down in one or both places to ascertain to what extent the skull

had been injured and if necessary trephine while under the anesthetic. This was delayed partly from the fact, that his condition was better one day and worse the next. He made a perfect recovery and the Superintendent afterwards settled with him for \$650.00.

TIC DOULOUREUX OR EPILEPTIFORM NEURALGIA.*

By T. J. SHOEMAKER.

The most serious form of chronic neuralgia is so-called Tic Douloureux. The lightening paroxysms of pain, its severity and its resistance to treatment, this fact shows the usual type of all chronic neuralgias of the fifth nerve, unless relieved by treatment, these neuralgias last during the whole lifetime of the patient.

Sometimes there are long intervals between the attacks. The human body is subject to many kinds of tics, as a general rule they do not cause any pain, but Tic Douloureux is always a painful tic. Its most common cause is direct irritation of the dental nerves. The chronic neuralgia of the second and third division of the fifth nerve is in a large proportion of cases excited by bad teeth, ossification of the pulp cavity. These irritations usually set up a neuritis, which has several times been demonstrated, on excised nerves, and this neuritis is capable of keeping up the neuralgia after the original source of irritation has been removed. The pain often occurs in paroxysms of frightful severity, aggravated even by the slightest touch, the least motion of the affected parts, the touch of even the end of the whiskers on the affected parts will bring on one paroxysm after another. The pain will sometimes begin as though a briar or needle is sticking into the parts.

The Tic will feel just like the sound of the clicking of a telegraph battery as it were. Paroxysms will come on one after another and will continue for several days and nights until the patient is almost exhausted.

Frequently the intervals between the paroxysms are often quite incomplete, and the sufferings of the patient are so severe and persistent as to render life almost intolerable. Medicines as a rule are of no good any longer than the effects are on. When the effects of the medicine are off the Tic Douloureux returns even more severe than before. The patient may think sometimes he has found a remedy but the very

* Read by title before the Kentucky State Medical Association October 11, 1906.

next attack he will find the remedy is worthless. Then he or she will first try one thing and then another. It is a disease that never lets up on the patient long at a time.

Every time a patient has a return of it, he or she will find that it is more severe than the previous attack.

It has always come to stay. Every medicine in the *Materia Medica* that will control pain has been tried as a remedy. Perhaps for the epileptiform or other chronic forms of neuralgia, quinine, phosphorus, gelsemium and aconite are the best remedies. Doctor Samuel D. Gross was one of the first to use morphine hypodermatically in neuralgia away back in the fifties, which was afterwards generalized by Mr. Wood. Professor Carnochan of New York away back in the fifties resected the nerves in facial neuralgia successfully. He published these cases, successfully done, in the *American Journal of the Medical Science* for January, 1858. The operation done by Prof. Carnochan was a very extensive and complicated one. Surgeons following in his footsteps have not made it a very successful and safe operation.

The last operation I notice to do, is to cut down on the affected nerve and by a very slow process to twist the nerve out in its entire length, this takes about 18 or 20 minutes (See the *Chicago, Ill., Year Book*, Vol. 2, page 230 for the year 1906). Many things have been injected down deep into the tissues with the hope of giving relief, viz:—sterilized water, carbolic acid, in a two per cent. solution. Alcohol, osmic acid and many other things.

Osmic acid (m.x to xx. of a 1 per cent. solution fresh made) has occasionally given rise to abscess or sloughing where repeated injections have been used in the same neighborhood and close under the skin. My experience with a two per cent. solution of carbolic acid is that it causes considerable soreness in the parts and gives only temporary relief. I have not gotten any benefit from deep alcoholic injections.

Whiskey taken by mouth will quiet extreme pain and produce sleep which will give the patient rest, but the pain will return as soon as the effects wear off. It is not necessary in my opinion to carry the division of either of the branches of the fifth nerve back to its exit from the skull, provided you use osmic acid injections. The only operation I have any faith in is to cut down on the affected nerve and pull or twist it out to a considerable extent and inject it with ten minims of a four per cent. solution of osmic

acid, then clip the nerve and close the wound with horse hair sutures.

POST GRADUATE COURSE.

SECOND MONTH. —SURGERY OF THE BRAIN.

First Weekly Meeting.
Anatomy of the Cranium
Anatomy of the Brain.....
Second Weekly Meeting.
Physiology of the Brain.....
Cerebral Localization
Fractures of Vault of Cranium
Third Weekly Meeting.
Fractures of Base of Cranium... ..
Differential Diagnosis of Concussion and Compression of Brain.....
Fourth Weekly Meeting.
Gunshot Injuries of Head
Intracranial Hemorrhage
Traumatic Meningitis. Etiology, Symptoms.
.....
Fifth Weekly Meeting.
Abscess of Brain: Pathology, Symptoms, Treatment.
Tumors of Brain: Varieties, Pathology, Symptoms
Monthly Meeting.
Diagnosis of Tumors of Brain
Technic of Brain Surgery
Diagnosis of Fractures of Base

FIRST WEEKLY MEETING.

Anatomy of Skull.
Demonstrate Specimen.
Vertex of Skull: External surface—boundaries, bones included, sutures, glabella, bregma,inion.
Internal surface—shape, surface markings.
Base of skull: Internal surface, fossae.
Anterior Fossa: Shape, boundaries, bones, portion of brain, foramen caecum, olfactory groove, ethmoidal foramina.
Middle Fossa: Boundaries, bones, portion of brain, optic foramen, sella turcica, cavernous groove, sphenoidal fissure, foramen ovale, foramen spinosum, foramen lacerum medium, anterior surface of petrous portion of temporal.
Posterior Fossa: Shape, boundaries, bones, portion of brain, foramen magnum, jugular foramen, internal auditory meatus, inferior occipital fossae.
External Surface: Boundaries, occipital, temporal, sphenoid and ethmoid bones, articular surfaces, orifices of foramina mentioned

above, stylo-mastoid foramen. Roof and apex of orbit.

Lateral Region: Boundaries, bones.

Temporal Fossa: Boundaries, sutures, stephanion, pterion.

Mastoid Portion: Bones, mastoid process, auditory meatus.

Zygomatic Fossa: Spheno-maxillary Fossa:

Anatomy of Brain.

Membranes of Brain: (1) Dura Mater—structure, attachments. (2) Arachnoid—structure, subarachnoid space. (3) Pia Mater—structure.

Portions of Brain: Medulla, pons Varolii, cerebellum, midbrain, cerebrum.

Ventricles: Lateral, third, fourth, foramen of Majendie, aqueduct of Sylvius, communications, contents.

Distribution of Gray Matter: (1) In the bulb, (2) in the pons, (3) in the midbrain, (4) in the cerebrum, (5) in the cerebellum.

Structure of Bulb: Shape, size, surfaces, white matter, gray matter, pyramids, olives, restiform bodies, funiculi, corpora quadrigemina.

Structure of Pons: Distribution of white and gray matter.

Structure of Midbrain: White and gray matter, aqueduct, fillet. Crus cerebri.

Origin of cranial nerves.

Cerebellum: Vermis, hemispheres, peduncles, white and gray matter.

Cerebrum: Hemispheres, corpus callosum, cortex, lobes, basal ganglia, corpus striatum, optic thalamus, internal capsule, corona radiata, projection fibers, association fibers, commissural fibers.

SECOND WEEKLY MEETING.

Physiology of the Brain.

Motor Functions: Motor area, methods of localization, trace fiber from cortex to arm.

Sense Areas: Muscle sense, pressure and temperature sense, pain sense.

Center of Vision: Location, lower centers.

Auditory Center: Location, two roots of cranial nerve.

Centers of Smell and Taste.

Speech Centers: Motor and sensory aphasia.

Functions of Cerebellum: Coordination, physical functions, location of function.

Functions of Medulla: Respiratory and circulatory centers.

Cerebral Localization.

Sensori-motor Area: Fissure of Rolando, anterior and posterior central gyri, paracentral lobule, operculum, third frontal gyrus. Leg. arm and head regions. Hemiplegia, monospasm, Jacksonian epilepsy. Muscular sense, parietal lobes.

Speech Areas: Sylvian fissure, third frontal convolution, motor aphasia. First and second temporal convolutions, sensory aphasia. Visual-speech area, lower parietal.

Right and Left-handed Persons.

Sight-Area: Occipital lobes, hemianopsia.

Sound Area: First and second temporal convolutions.

Psychic Centers: Frontal lobes.

"Silent Areas."

Cerebral Topography: Fissure of Rolando, fissure of Sylvius. Horsey's method, Krönlein's method, Chiene's method.

Fractures of Vault of Cranium.

Varieties: Fissured, fragmented, comminuted, perforated, simple and compound. Fracture of inner or outer table alone. Depression, central and peripheral.

Mechanical principles involved "bending" and "bursting" fractures. Lines of fracture.

Prognosis: Depends on brain injury and infection. Extent of injury, area of brain involved, degree of depression, simple or compound fracture. Remote effects, headache, epilepsy and insanity.

Treatment: (1) Fracture without depression and without cerebral symptoms, (2) with depression, (3) with cerebral symptoms, (4) compound fractures.

THIRD WEEKLY MEETING.

Fracture of Base of Cranium.

Pathology: Usual points of impact, beginning points of fracture, line of fracture, transverse, longitudinal, diagonal, circular. Effects of bilateral and unilateral compression. "Counter-stroke."

Diagnosis: (1) History of character of blow or injury, site of impact, etc. (2) Ecchymoses—In eyelids, about eyes, mucous membrane of larynx, mastoid region, post-cervical region. Time of appearance. Differentiate from local injuries. (3) Flow of brain tissue, blood and serous fluid—In external auditory canal. From nose. From pharynx. Significance of each. Differentiate in case of hemorrhage. (4) Disturbance in function of cranial nerves. Forms of injury. Sites of injury.

Treatment: Disinfection of aural and nasal cavities. Drainage. Removal of fragments. Rest.

Differential Diagnosis of "Concussion" and Compression of Brain: (1) Onset of symptoms, (2) special senses, (3) respiration, (4) pulse, (5) nausea and vomiting, (6) bowels, (7) bladder, (8) deglutition, (9) voluntary muscles, (10) pupils, (11) prognosis.

FOURTH WEEKLY MEETING.

Gunshot Injuries of Head.

Character of wound, wound of entrance, wound of exit, effect on inner and outer tables, effect on meninges, effect on brain substance, hydraulic and hydrodynamic pressure. Differences of effects of leaden and jacketed missiles. Effect of initial velocity and range. Symptoms: Areas of brain involved. Medicolegal interest in pistol-shot wounds. Treatment: Disinfection. Indications for trephining. Use of X-Ray.

Intracranial Hemorrhage.

Extradural Hemorrhage: Middle meningeal artery and branches. Character of wounds, by "contrecoup." Effects of hemorrhage, local and general.

Symptoms: Mental disturbances, "free interval," pulse, respiration, motor disturbances, sensory disturbances, pupils.

Treatment: In compound fracture, indications and technic. In internal hemorrhage, indications for trephining. Kronlein's "sites of election," method of localization.

Subdural Hemorrhage: Pial vessels, branches. Character of injuries. Extent of hematoma, quantity, absorption. Differentiate from supradural—(1) free interval, (2) pulse, (3) motor disturbances, (4) localizing symptoms.

Traumatic Meningitis.

Etiology: Injury, micro-organisms present, mode of entrance.

Pathology: Leptomeningitis, character of exudate, extent, cortex. Pachymeningitis, changes in dura, exudate, origin.

Symptoms: Early and late. Cortical or basilar. Chills and fever, headache, pulse, nausea and vomiting, pupils, delirium, stupor, coma.

FIFTH WEEKLY MEETING.

Abscess of Brain.*Acute Traumatic Abscess.*

Pathology: Compound fracture, injury to meninges and cortex, character and quantity of pus, changes in meninges and cortex, granulation and cicatrization.

Symptoms: Local evidences of sepsis, pulse and temperature, focal symptoms. Differentiate from meningitis.

Treatment: Indications for operative treatment.

Chronic Traumatic Abscess.

Pathology: Secondary to pus in skull, foreign bodies, ear, nose, thorax. By metastasis. Sinus-thrombosis. Location of abscess, ab-

cess membrane, mode of extension, rate of growth.

Symptoms: (1) Primary symptoms, cause and significance. (2) Latent period, length, usual symptoms. (3) Secondary symptoms. (4) Terminal period.

Treatment: Indications for exploring or trephining.

Tumors of Brain.*Varieties and Pathology.*

Glioma and Sarcoma: Age, primary and secondary, diffused, number, rate of growth, from white or gray matter, points of difference.

Carcinoma: Age, primary, by extension, by metastasis, number, location.

Cysts: With malignant tumors, from clot, parasites, depressed fracture.

Tubercle: Age, history, secondary or primary, number, location.

Gumma: Previous history, number, location.

Symptoms.

General: Headache, optic neuritis, vomiting, giddiness, mental disturbance.

Localizing: (a) Central motor area, signal symptom, extension, paralysis or anesthesia.

(b) Prefrontal region, mental symptoms, later symptoms. (c) Parieto-occipital lobe, aphasia. (d) Occipital lobe. (e) Temporal lobe. (f) Basal ganglia. (g) Pons and medulla.

COUNTY SOCIETY REPORTS.

AMERICAN PROCTOLOGIC SOCIETY.

Ninth Annual Meeting, Held at Atlantic City, N. J., June 3 and 4, 1907. The President, Samuel G. Gant in the Chair. Officers Elected.

The following officers were elected:—President, A. Bennett Cooke, Nashville, Tenn.; Vice-President, Louis J. Krouse, Cincinnati, Ohio; Secretary-Treasurer, Lewis J. Adler, Jr., Philadelphia, Pa., and the Executive Council, J. Rawson Pennington, Chicago, Ill.; Chairman, Samuel G. Gant, New York City, N. Y.; A. Bennett Cooke, Nashville, Tenn.; Lewis H. Adler, Jr., Philadelphia, Pa.

The place of meeting for 1908 is Chicago, Ill., the time to be announced later.

Election of Members.

The following were elected members of the society: Jerome M. Lynch, of New York City; Jas. A. McVeigh and J. A. McMillan, of Detroit, Mich.

The following is an abstract of the principal papers read:

President's Address.

The President, Samuel G. Gant, of New York City, said "that the annual meetings of the society were like a Post-Graduate School where advanced information in proctology could be obtained by the members. He considers it unwise to admit to membership in the society the general surgeon and young rectal specialists of less than five years experience in this special work, because the membership would become too large and the papers contributed by them would not meet the requirements.

"He maintained that the proctologists of the future, in order to be successful, must have a thorough literary and medical education, a hospital training and clinical facilities, and that he must be clever, industrious and persistent. He emphasized the necessity of educating both the profession and the laity, as to the remarkably improved methods now employed in the handling of patients suffering from disease in the lower bowels. He also said it was the duty of the proctologist to demonstrate by his work and writing that most tubercular fistulae were curable and that the curing of ordinary fistulae did not tend to bring about lung or skin affections as was formerly believed; that fecal incontinence does not follow fistula operations, when the muscle is cut at a right angle and the wound is properly dressed; that many rectal diseases, such as fissures, ulcers, small fistulae and some hemorrhoids can be operated upon under local anaesthesia; and that in the majority of instances, constipation and chronic diarrhoea are curable by local and surgical measures.

"Finally, he emphasized the fact that the etiology of many discomforts, nervous and reflex phenomena, usually attributed to the genital organs is frequently to be found in some pathologic process located in the sigmoid, rectum or anus."

Report on Proctologic Literature From June 1906 To June 1907.

Samuel T. Earle, Baltimore, Md., read his report on Proctologic literature, covering a period from June 1906 to June 1907, in which he said, "that while there has been nothing startling in Proctologic literature in the past twelve months, your committee is gratified with the steady progress in this branch of medicine and surgery, as has been reflected in the literature on this subject. Especially gratifying have been the recommendations for the radical treatment of carcinoma of the upper rectum and sigmoid, as set forth in the papers of Samuel G. Gant, W. J. and C. H. Mayo, and James P. Tuttle, in which they all recount the combined advantages of the abdominal and perineal routes, which we

think will greatly lessen the likelihood of recurrences, and increase the number of permanent cures. We note with pleasure the systematic efforts that are being made in the study of the etiology of puritus ani. The paper of Wallace of London in 1905 on the study of this question, stimulated the efforts of others in this direction, and we find an excellent paper by J. C. Hill, of Boston, on the same, in the Boston Medical and Surgical Journal, 1906. In this article, he takes the stand with Wallace that there is always a cause for this malady in which the puritus is only a local symptom. We quote him as follows: 'Puritus ani is the symptom caused by unnatural moisture or discharges, produced either by lesions about the anus or by congestion, or some pathologic condition in the rectum or sigmoid. It is due to one of five causes. First, and by far the most important are superficial ulcerations, or abrasions of the anal canal. Second, catarrhal diseases. Third, external hemorrhoids. Fourth, inflammation or irritation of the crypts of Morgagni. The free borders or valves of these crypts consist chiefly of nerve fibres, ganglion cells and connective tissue. When inflamed or infected, they may give rise reflexly to puritus ani. The writer calls attention to the tits which project from the margin of these valves as accessory sense organs. When hypertrophied or elongated they cause many distressing symptoms about the anus, viz., creeping, crawling sensations and itching. Fifth, small polypi of the anal canal.'

"It is not only necessary to remove the exciting cause of the disease, but, also to direct appropriate treatment to the unnatural conditions of the skin. In this connection your committee is glad to be able to report a number of cases of the aggravated form of this disease, which had failed to respond to the usual local and constitutional methods that were successfully treated by Dr. Ball's recommendation of dividing the anal nerves. These have been reported by Drs. Mattin and Earle.

"Charles B. Kelsey calls attention to the office treatment of hemorrhoids by puncture with the electric cautery. The method is to make numerous puncture with a pointed cautery to the internal hemorrhoids. This method has been used for the past ten years in lieu of that by injection, with most satisfactory results, and without any unfavorable effect. For the details of the method, I would refer to his article in the Therapeutic Gazette for March 15, 1906. The reviewer would respectfully report with reference to this suggestion, that about ten years ago he tried in a number of cases, but with only temporary success where the hemorrhoids were large. It answered very well in small capillary hemorrhoids. J. A. Hartwell in the Annals of

Surgery, Philadelphia, for 1906, vol. 43, page 146, reports a case of resection of the rectum for syphilitic stricture, with end to end anastomosis. As might have been predicted, it recurred, and while it was necessary to continue dilating, he was not hopeful for results. Your committee would remind its members that such radical measures seldom accomplish the desired results, as recurrence is almost inevitable.

"Additional Experience With a New Procedure In Operating For Ano-Rectal-Fistula," By

J. R. Pennington, Chicago, Ill., who said: "I have found the employment of the seton in operating on cases of ano-rectal fistula greatly aids in preserving the contour of the anus and the functions of the sphincter muscles.

"The technique in using the seton is as follows: After all of the fistulous tracts external to the sphincter are divided a probe-pointed director is passed into the bowel through the remaining tract and an incision made on its distal side. This incision should extend far enough distally to divide all or a part of the fibres of the external sphincter and in such a direction as to locate the transferred internal sphincter and in such a direction as to locate the transferred internal opening at or near the anal margin. Then, turning the knife, make an incision—Salmon's "back cut"—on the proximal side of the tract. A seton is then passed through the opening entering the bowel and tied loosely around the tissues remaining and undivided.

"The wound is dressed as after the ordinary incision operation for fistula. At the end of twenty-four to thirty-six hours the wound is redressed, care being taken to dress it so that the opening entering the bowel will be made to heal from the proximal toward the distal side. The object in doing this is to advance the final fistulous tract as far distally (toward the skin) as the case will permit, so that, if possible, it will pass through or distally to the fibers of the external sphincter, when the healing process is complete.

"As a rule the enlarged tract entering the bowel soon closes, with the exception of the part through which the seton passes. As soon as this has occurred the seton may be removed, and by the time the external wound is healed the tract entering the bowel will possibly have closed also. Should it not, at any time later this little tract may be dissected out and the remaining fibers of the muscle sewed together, thus preserving the contour of the anus and the functions of sphincters."

"Occult Hemorrhoids From the Rectum," By

William M. Beach, Pittsburg, Pa., who stated: "1.—Occult blood in the stool indicates disease high up in the gastro-intestinal tract.

"2.—Accompanied by certain rational symp-

toms as pain localized. the origin of the occult blood can be noted.

"3.—The discovery of blood in the stool may enable us to predict hemorrhage or prevent disaster.

"4.—The most frequent sources of occult blood are in the order named: stomach, duodenum, and caput coli.

"5.—The Aloin-turpentine test as practiced by J. Dutton Steele, of Philadelphia, is recommended.

"6.—Proctologists should make an examination for occult blood a routine practice in cases of anaemia, accompanied by diarrhoea or constipation."

"Etiology and Symptoms of Fissure," By

C. F. Martin, of Philadelphia, Pa., who said: "The fissure is usually situated posteriorly and directly over the 'white line' of Hilton, due to the arrangement of the fibers of the external sphincter and to the fact that the anal canal has less electricity directly over that line. Most fissures start as the result of the distention of the canal by hard feces and excessive straining at stool. These situated anteriorly, are often seen after confinement due to the pressure of the fetal head upon the perineum.

"The sentinel pile is noted in most cases if the fissure has been present for any length of time. It is a simple inflammatory hypertrophy. Hypertrophy of the anal papillae does not appear to be an important factor in the causation of fissure. True hypertrophy of the sphincters is rarely seen, but in its place we find an excessive irritability of the external sphincter.

"The distinctive symptom of this disease is pain or sphincteralgia, preceded by a "pain interval" of from one minute to an hour, during which time the patient has comparative comfort. The pain is caused by spasms of the sphincter compressing the nerves in the ulcer. This contraction interferes with the perianal circulation and renders the inflamed nerve more sensitive. The "pain interval" is caused by a temporary improvement in the perianal circulation produced by the straining efforts at stool.

"The constipation of fissure often precedes the formation of the ulcer, an irritable sphincter being the underlying factor in the production of this condition. The constipation increases after the formation of the ulcer due to the fear of the patient of the pain following stool.

"The treatment consists in the divulsion of the sphincters and the usual stimulating after treatment. The sentinel pile should be removed at the time of divulsion. Division of the external sphincter is not advised, for frequently it does not unite and eventually atrophies. Fistulae, abscesses and fecal impaction are mentioned as frequent complications of fissure and call for appropriate treatment."

"Local vs. General Anaesthesia in Rectal Surgery," By

G. B. Evans, Dayton, Ohio, who stated that "Pain naturally is the common curse and dread though relatively essential to the human family.

"The law of self preservation when an individual is threatened with pain is at once a law of resistance, manifested by intense expectancy and defiant attitude.

"The shock incident to the terror of pain is incomparable to that which is likely to follow an abbreviated use of a general anesthetic. In consideration of the evolutionary plane occupied by the average American of to-day and the more remote period of his removal from the gorilla peripheral sensibility of the jungle, we are forced to conclude that he is more sensitive, and in need of greater consideration for the relief of pain. Because an operation can be done painlessly it does not follow that there will be subsequent suffering and some and perhaps severe shock.

"But in this nerve block period of Creile and Pennington, and the Gant period of dermal and sub-dermal distention we are told there is scarcely any use any more for a general anaesthetic. Do we not believe as Proctologists that in our operative field, sensibility is most difficult to abolish, and would it not naturally appear that more narcosis is necessary in this kind of surgical work and as a consequence more shock? Again, would it not be possible by the combined use of general and local anaesthesia less shock would ensue and more operations could be made with success. I believe that by using the local anaesthetic preceding the general anaesthesia we lessen the amount of the general anaesthetic appreciably, diminish the dread and fear, and consequently diminish shock and danger thereby. Therefore, the combined method of narcosis, less anaesthetic, suspending shock incident to conscious dread, as well as anaesthetic shock, rendering more complete operative area—consequently more satisfactory work. It is simple to operate upon prolapsing piles, but not so simple to operate upon piles above the sphincters yet demanding operative interference.

"The injections of sterile solutions disturbs the parts anatomically. The frequent punctures through the tissues invite infection. You can never measure the nerve and seldom the surgical all of your patient. Its chief advantage is that occasionally you are able to do work in your office and even then unsatisfactorily.

"I fail to see the advantage of operation under local anaesthesia in your office and follow your patient home and give hypodermic of morphia over the usual custom of operating at home in the first place.

"An operation for hemorrhoids is a matter

of some seriousness—often attended by some shock—often bloody and the greatest caution should be observed that asepsis be obtained.

"I do not think it best for our patients that general practitioners should be taught that aseptic precautions at the time of operation and rest at home for a few days, is unnecessary. Do we not magnify the applicability of local anaesthesia, will not accidents occur, are we not sacrificing perfect scientific work, are we not belittling our chosen work—a class of operations that are important and not free from danger?"

"The Sigmoidal Factor in Constipation." By

E. A. Hamilton, Columbus, Ohio, said: "In a certain per cent. of intractable cases of constipation, organic change in the wall of the sigmoid is the controlling factor. This change is entirely independent of any disturbance which may occur on the outer surface of the viscus; e. g. malposition and pathologic flexures due to adhesions. The change in the gut occurs in the sub-mucous and muscular coats and consists of a round cell infiltration of these coats which subsequently contracts, thereby to a greater or less degree narrowing the lumen of the bowl. The round cells change into spindle cells subsequently undergoing a metamorphosis into true connective tissue. The contraction of this connective tissue so narrows the caliber of the sigmoid that constipation of an obstinate type must result. This change is not always limited to the sigmoid, it frequently involves the descending colon as well; in addition to the contraction of the gut it loses also its resilience which further adds to the difficulty of the passage of fecal debris. The etiologic factor is the absorption of bacteria and toxic products from the sigmoidal contents. The mesentery is also involved and is thickened and shortened. The whole process is chronic, several years being required to bring on the condition. Surgery offers the only relief, an anastomosis must be effected by any suitable surgical procedure between the unaffected position of the intestinal tract above and below the lesion.

A Report of Two Cases of Sigmoidopexy, By

S. T. Earle, Baltimore, Md., who said: "That in one of the cases there was the 3rd degree of prolapse of the rectum, the invagination of the upper part into the lower portion of the rectum; in the other case there was a very acute flexure of the sigmoid upon the rectum, both of the conditions, as is well known, are frequently due to an abnormally long meso-sigmoid. The symptoms in each case were obstinate and persistent constipation, frequent bearing down pains in the lower pelvis, a sense of weight and especially a feeling of unrelief for some hours following a stool, or an attempt at the same; associated with these local symptoms were darting pains in various parts of the body, nausea, anorexia, fre-

quent headaches and the various neurotic symptoms that go to make up a typical case of neurasthenia. The case of invagination was diagnosed positively by a digital examination while straining at stool, the sulcus being distinctly felt with the finger; the case of acute flexure was diagnosed by means of the proctoscope, the flexure being so acute that it was only possible to enter the sigmoid with the proctoscope by getting the end of the latter around the flexure, and pulling it aside. The flexure was so acute that it obliterated the lumen of the bowel at this point. The technique of the operation is such as is given in Tuttle's & Gant's works on 'Diseases of the Rectum and Anus.' I met with no special difficulty in performing the operations. The meso-sigmoid was very long in both. I was particular in pulling off the abdominal peritoneum where the sigmoid was to be held in apposition and also in attaching the sigmoid to the transversalis fascia. Both cases made good recoveries, except that one was retarded by a stitch abscess. The results of both cases were most satisfactory and pronounced, with almost immediate relief of the persistent and obstinate constipation, with the gradual disappearance of the neurotic symptoms. Dr. Gant has recently reported a number of sigmoid-oplexies and coloplexies with most satisfactory results.

"Dr. Clark in a paper read before the Medical and Gynecological Sections of the Medical and Chirurgical Faculty of Maryland, on Feb. 15, 1907, called attention to the frequent associations of gastropnoxis; floating kidney and enteroptosis in the same individual."

"Fecal Impaction."

Lewis H. Adler, Jr., of Philadelphia, Pa., in a paper entitled "Fecal Impaction," called attention to the result of obstipation, or an attack of constipation causing an accumulation of feces in the caecum or in any part of the colon; but the term impaction,—the subject of the paper, should be usually employed when such an accumulation occurs in the pouch or ampulla of the rectum, or in the sigmoid flexure.

Attention was called to the difference between an ordinary persistent constipation and an impaction,—as the latter may follow from a single attack of constipation; whereas obstinate constipation may never, or only after a long period cause impaction. The symptoms of the two conditions are also very different, as an impaction is usually marked by a diarrhoea, whereas chronic constipation is associated with costiveness. After calling attention to the various causes of the malady under consideration and the symptoms of the same, the treatment was detailed as consisting primarily, in the removal of the mass, and, secondarily in the relief of the inflammation of the mucous membrane occasioned

by the irritating presence of the fecal matter as well as the removal of all causes which contribute to the constipated habit, which is undoubtedly the prime factor in most cases in producing an impaction.

The easiest manner of breaking up the fecal mass is to put the patient under an anaesthetic and then to forcibly divulse the sphincters, after which the mass may be disintegrated by means of the finger, a lithotomy scoop or an old-fashioned iron spoon. In women considerable assistance may be rendered by passing a couple of fingers into the vagina and by this means steadying the mass so that it may be the more readily broken.

In some instances the writer was able to break up an impaction without resorting to anaesthesia, simply by using the finger and sometimes by the additional use of a bivalve speculum and a rectal scoop or spoon.

Previous to resorting to instrumental aid in the removal of the impaction, the fecal mass may be softened and its passage facilitated by the use of enemas,—especially is this so in cases in which the sigmoid is in the part affected,—in which situation material assistance cannot be gained by the employment of instruments. For the purpose of administering the injection a douche-bag holding several quarts is to be preferred. The injection substance should be composed of soap and water to which I have found the addition of glycerine of considerable benefit, a dessert-spoonful to a quart. When the impaction is in the sigmoid, the injection should be given through a Wales bougie,—preferably the one modified by Dwight H. Murray, of Syracuse, New York, which is stiffer than the ordinary article sold; which latter is frequently useless for the purpose intended as it readily doubles on itself, and a high injection is rendered impossible by its use. When this method is employed the patient should be placed in the knee-chest posture.

A word of caution should be given here as to the danger surrounding the unguarded use of drastic purgative drugs in cases of impaction. By their employment peristalsis is increased and the fecal mass softened, but the bowel in its inflamed and distended condition may be thereby the more easily ruptured, and, if in addition, a stricture is present, the caliber of the gut may be entirely occluded by forcing into it the hard fecal mass with the attendant symptoms and consequences of total obstruction of the intestines. So much for the treatment of the actual impaction.

"Pruritus Ani—Is it a Disease per se or Merely A Symptom?"

Louis J. Krouse, Cincinnati, Ohio, who quoted from the works of Bodenhamer, Agnew, Wright,

Ball, Crepps, Gant, Matthews, Tuttle and others, their opinions regarding the etiology of this disease, and then stated "Pruritus Ani essentially is a disease which is due, not to a local, but to a constitutional cause, and is due to some trophic changes in the nerves supplying the parts." He further stated, that the changes occurring in the skin of the anus and surrounding parts, namely, the hypertrophy, the loss of pliability, and the absence of pigment, can only be explained on the faulty nervous supply of the parts. He showed that an increase of pigment ought to accompany severe itching, and not a total disappearance, and finishes his article by saying that "The absorption of the normal coloring matter of the affected area does occur, notwithstanding that the epidermis was not destroyed, and said "A similar process of absorption takes place in leucoderma.

All authorities acknowledge that the cause of the latter disease is to be found in the nervous system." and concluded with the statement "That Puritus Ani, at least in such cases, is a disease per se and not a symptom."

Dwight H. Murray, of Syracuse, New York, presented a new Hemorrhoidal Clamp which had the following qualities in combination, that make a first-class instrument. Viz: Scissors shaped, parallel jaws; can be closed and released instantly without the use of a thumb screw, thereby saving much time while operating.

The Goodell dilator reversed is used as the ground principle for the lock.

Dwight H. Murray, of Syracuse, New York, reported the case of a man 48 years old who had been troubled with sciatica in the right leg for two years and had also been a sufferer from hemorrhoids for ten years, having frequent profuse hemorrhages therefrom.

The hemorrhoids had not been treated. The sciatic nerve had been stretched and treated by various methods, by a physician at his home town, included in which was the following completed in three sittings two days apart:

At the first sitting, six hypodermic injections 1-150 gr. of atrophine each were given into the sheath of the sciatic nerve: At the second sitting, seven injections of the same amount, and at the third sitting, eight injections were given as before and one extra into the nerve before it leaves the pelvis. The patient was unconscious for fourteen hours after the last sitting, very little improvement resulted.

In November 1906, the author was first consulted, and on December 12, 1906, operated on him for internal hemorrhoids. He made the usual recovery up to the ninth day, when there was a sudden profuse secondary hemorrhage. The patient was almost ex-sanguinated before the author arrived.

He immediately examined, found the superior hemorrhoidal artery was throwing a full-sized stream, this was secured, the patient stimulated and made an uneventful, but slow recovery. The patient has had no sciatic pain since the operation.

Dr. Murray concluded that inasmuch as sciatica is often symptomatic, that no such severe treatment is justified until all possible reflex causes are first removed.

The cause of the hemorrhage was probably due to the thrombus or eschar at the end of the vessel being thrown off before thorough healing had taken place, and was influenced largely by his general anemic condition before operation

"The Treatment of Ischio-Rectal and Pelvi-Rectal Abscesses," By

T. Chittenden Hill, of Boston, Mass., who said "That he employed general anaesthesia produced with ethyl chloride for the ischio-rectal abscess and other anaesthesia for the pelvic rectal abscess.

"His experience with infiltration anaesthesia has been unsatisfactory. He emphasized the importance of an early incision for perirectal abscesses, claiming that when acute symptoms have existed for a day or two, with pain and tenderness, even before there is much edema or discoloration of the skin, long before fluctuation can be detected, an incision may prevent abscess formation by allowing the escape of blood or serous exudate from the engorged blood vessels.

He advised a T incision and breaking up the existing septa with the finger, after which the sphincters are divulsed. He believed squeezing, scraping or disinfecting an acute abscess to be a great mistake, as it only serves to destroy the new granulation tissue and to spread the infecting bacteria. For the deeper ischio-rectal and in all pelvic-rectal abscesses he recommended rubber drainage tubes, discarding their use as quickly as possible in the after-treatment.

"He believed that the great majority of pelvic-rectal abscesses should be reached by perineal dissection."

"Cryptitis" By

J. Coles Brick, Philadelphia, Pa., who said: "The anal valves and crypts, first pointed out by Morgagni, and called after his name, are found as vestigial remains of the junction of the rectal mucous membrane with the skin. They vary in number and size, but are absent in the anterior and posterior commissures. They have no known functions, but are the cause of obscure symptoms, when diseased, and from the fact that the valve or covering part of the crypt may conceal the diseased area, repeated examination will fail to show the lesion, unless each crypt is probed, when tenderness or pain will be felt. A conical

fenestrated speculum is the best to use, and when the diagnosis has been made, the valve should be removed and the crypt converted into a raw surface, so that healing will obliterate it."

A. B. Cooke read a paper on "Observations on Certain Points in the Anatomy and Physiology of the Rectum." He expressed the view that the usual conception of the external sphincter muscle is erroneous,—that under normal conditions it is not in a state of tonic contraction, but, on the other hand, is at rest and passive, the shape of the muscle and the arrangement of its fibres being such that the anal aperture is maintained in a state of passive closure. It is not conceivable that voluntary muscle should require the constant action of nerve force to keep it in a state of rest. The only action of this muscle is to voluntarily oppose or terminate the act of defecation by tonic contraction.

With reference to the internal sphincter, the essayist observed that there is no occasion to credit this muscle with any special action in addition to that of the circular coat of the bowel, of which it is a part. By reason of its location and thickness, it probably exercises some passive sphincter control, and its chief action is undoubtedly that of a detrusor, serving to complete the expulsion of feces and keep the anal canal free of contents.

The levator ani muscles, acting together, constitute the sphincter of the proximal extremity of the anal canal. To understand this it is only necessary to remember (1) that the upper or pelvic surface of these muscles presents a deep, funnel-shaped concavity, the beginning of the anal canal being at the lowest point; (2) the strong bundles of fibers which unite immediately behind the rectum arise in front from the pubis and anterior portion of the fascial line and pass downward and backward in close relation with the lateral walls of the rectum, crossing it obliquely at the upper limit of the anal canal.

The well-known difficulty of voiding urine while a costive stool is being expelled, which is usually attributed to the action of the levatores ani, is due rather to the pressure of the fecal mass upon the prostatic and membranous portions of the urethra, since, at the time of defecation, these muscles, like the sphincters, must be in a state of relaxation.

The part played by the anal canal in defecation is purely passive, except at the completion of the act when the voluntary muscles which enclose it are strongly contracted, expelling any remnant of feces and bringing its walls again into their normal relation when at rest of close apposition.

The essayist dissented from the commonly accepted teaching that there is an inhibitory center

in the cord which presides over the action of the external sphincter and which is called into action at the time of defecation to inhibit its tonic.

The relaxation which occurs at such times seemed to him fully explained by the mechanical pressure of the descending mass upon a structure which only offers passive resistance unless contracted by voluntary effort, and which possesses sufficient resilience, independent of any nerve influence to regain its normal form and tone as soon as the pressure is removed."

Anderson—The Society met on the afternoon of Monday, September 2nd, with R. L. Milton, at Fox Creek.

R. L. Milton read a paper on "Therapeutics of Iodine," Dr. Milton said: "That in homeopathy physiological action and therapeutics were the same, and to understand the latter necessarily meant a correct understanding of the former. In order to administer a chemical as a medicine you must not rely on the body acting as a chemical laboratory; as chemical actions we expect to take place in the human organism does not always take place.

"Iodine has its most prominent effect on the glandular system and mucous membranes, atrophy of the mammary glands and of the testicles being one of first effects of its administration. Where we have a tubercular disintegration of the body anywhere, and the patient shows a peculiar luster of the eyes, good appetite, constant loss of flesh, easily fatigued, iodine will be found to be a specific. Where discharges from mucous membranes are excoriating, iodine is indicated. In syphilis, it is not clear whether iodine acts as a specific or not. It dissolves the albuminoids of mercury and releases any mercury that might be in the system, believes mercury to be the specific in syphilis and that iodine only keeps it in solution.

C. W. Kavanaugh opened the discussion and complimented the paper very highly. He mentioned in addition the excellent antiseptic qualities of the tincture of iodine. It does not possess any value as to stopping the spread of erysipelas. Be careful in using the tincture about the gums as it is very destructive to the alveolar processes.

J. R. Murdock: He said he depended largely on calx iodata in phthisis pulmonalis. If you give free iodine after a long period of administering mercury you will salivate every time you do it.

After an interesting discussion of the advantages of establishing a hospital at the county seat, Lawrenceburg, the vice president, J. R. Murdock appointed the following committee to look into the matter and report at the next

meeting. L. O. Pindar, chairman; J. L. Toll and J. W. Gilbert.

The society adjourned to meet with C. M. Paynter in Lawrenceburg on the first Monday in October.

J. W. GILBERT, Secretary.

AUDIT OF ASSOCIATION AND JOURNAL ACCOUNTS.

Bowling Green, Ky., Oct. 1, 1907.

DR. J. GARLAND SHERRILL, Chairman of Council,

KENTUCKY STATE MEDICAL ASSOCIATION,

Louisville, Kentucky.

DEAR SIR:

We audited the books of your Treasurer (W. B. McClure), and your Secretary (Arthur T. McCormack), for the period of October 1, 1906 to October 1, 1907 and now report as follows:

The Cash Balance October 1, 1907 shows as follows:

In Third National Bank, Lexington, Kentucky, to credit of Treasurer's Account, as per Cashier's Certificate sent us by Dr. McClure, 3,410.14.

Collections for Association during September in hands of Secretary, 151.00.

Collections for Journal during September in hands of Secretary, 314.25.

Total—3,975.39

Less Outstanding Vouchers September Expenses—503.33.

Balance, agreeing with the books—3,472.06.

Secretary delivered to us checks for amounts of September collections to be mailed to the Treasurer. We checked all cancelled checks in the possession of your Treasurer and they agreed with the Stubs, and every item in said Vouchers was properly charged in the various ledger accounts.

We checked all cancelled checks in the possession of your Treasurer and they agreed with the Stubs.

Saw and approved and receipted Voucher for every charge on the Cash Books.

Checked and found that all amounts entered on the Secretary's Cash Book account of County Societies, Subscriptions and Advertisements in Journal, agreed in detail and in aggregate with Treasurer's Books.

We herewith attach the following Exhibits, to which we respectfully refer you:

EXHIBIT "A"—RECEIPTS AND DISBURSEMENTS OF CASH OF YOUR ASSOCIATION, which includes Sec'y and Treas. from Nov. 1, 1906 to Oct. 1, 1907.

EXHIBIT "B"—DETAILED STATEMENT AND DISBURSEMENTS OF TREASURER from Nov. 1, 1906 to Oct. 1, 1907.

EXHIBIT "C"—SECRETARY'S MONTHLY BALANCE SHEET, agreeing with the books.

EXHIBIT "D"—DETAILED LIST RECEIPTS COUNTY SOCIETIES from Nov. 1, 1906 to Oct. 1, 1907.

EXHIBIT "F"—INVOICE OF PROPERTY OF ASSOCIATION Oct. 1, 1907.

EXHIBIT "G"—COLLECTIONS BY EDITOR ON ACCOUNT OF KENTUCKY MEDICAL JOURNAL, CORRESPONDING WITH CHECKS FOR EVEN AMOUNT FILED HEREWITH.

EXHIBIT "H"—COLLECTIONS BY SECRETARY ON ACCOUNT OF THE ASSOCIATION, CORRESPONDING WITH CHECKS FOR EVEN AMOUNTS FILED HEREWITH.

EXHIBIT "K"—TREASURER'S CHECKS, ACCOMPANIED BY VOUCHERS, ISSUED DURING OCTOBER 1906 O. K. by J. B. BULLITT.

We find the system of keeping the records admirably adapted to the needs of the business, and that they are in excellent condition, evidencing care and watchfulness.

Respectfully submitted,

POTTER-MATLOCK BANK & TRUST COMPANY, Public Accountants.

RECEIPTS AND DISBURSEMENTS OF CASH KENTUCKY STATE MEDICAL ASSOCIATION—Bowling Green, Ky., November 1, 1906 to October 1, 1907.

RECEIPTS.

Dues of County Societies 3,707.16

Subscriptions and Advertisements in Journal.... 2,902.12

Total Receipts 6,609.28

Balance November 1, 1906 2,237.28

Petty Cash from former Secretary, J. B. Bullitt..... 17.37

Total Receipts, including balance Nov. 1, 1906

8,863.93

DISBURSEMENTS.

Treasurer's Checks, 1906 Expenses, Outstanding.....	91.67	
Printing Journal, 12 months	2,716.25	
Stamps and Envelopes for Sec. and Editor's Office.....	389.20	
Salary of Secretary	550.00	
Salary of Secretary's Stenographer	478.92	
Advertising Commissions	360.97	
Sundry Expenses Secretary's Office	312.66	
Reporting Proceedings Owensboro Session ..	150.00	
Printing and Stationery, Secretary's Office	111.55	
Postage on Journal	86.09	
Printing for Officers, Councilors and Committees.....	62.50	
Treasurer's Office Expenses and Bond	48.91	
Sundries, Journal	44.12	
Auditing Secretary's and Treasurer's Books 1906.....	35.00	
Journal, Express, Freight and Hauling	28.84	
Secretary's Office, Ex., Frt., and Hauling ..	18.01	
Secretary's Traveling Expenses	7.15	
		<hr/>
Total Disbursements		5,491.84
Balance October 1, 1907		3,372.09
		<hr/>
Total		8,863.93
Made up as Follows:		
Balance 3rd Nat. Bank, Lexington, Ky., (Treas.' Acct). as per Cashier's Receipt		3,410.14
Outstanding Voucher Checks for September Expenses	503.30	
Collections for Sept., Journal Account ..	314.25	
Collections for Sept., Association Account	151.00	465.25
		<hr/>
Bal. as per Secretary's Books	3,372.09	
		<hr/>
	3,875.39	3,875.39

Detailed Statement of Disbursements of W. B. McClure, Treasurer, Kentucky State Medical Association, each made on a Voucher Check signed by D. M. Griffith, President; A. T. McCormack, Secretary, and himself, from Nov. 1, 1906 to Oct. 1, 1907.

1906		
Nov. 1. Treasurer's Check No. 23		\$ 50.00
James B. Bullitt, October Salary,		
Nov. 1. Treasurer's Check No. 24		41.67
Hattie Belle Kemp, October Salary,		
Nov. 5. Voucher Check No. 1		2.75
Bush-Krebs Co., Engraving Heading with Ken- tucky seal in center.		
Voucher Check No. 2		41.00
Geo. C. Fetter Co.,		
Typewriter Cabinet	\$ 33.00	
1 No. 46 G. O. Typewriter Chair	8.00	
Voucher Check No. 4		35.00
Ben C. Weaver & Sons, Auditing Books of Sec- retary J. B. Bullitt), and Treasurer (W. B. Mc- Clure for the period October 16, 1905 to Octo- ber 1, 1906, by order of the Council, O. Kd. by J. G. Sherrill, Chairman.		
Voucher Check No. 5		3.60
Addressograph Co., 1 oz. Metal Ink .. ..	.35	
1 set Pads for M.C.Machine .. ..	.65	
4 old-style Drawers @ 40c	1.60	
Expressage	1.00	

	Voucher Check No. 6	211.33
	A. T. McCormack,	
	*4,000 Postals for Letters about Insurance	
	Resolutions	40.00
	*4,000 2c Stamps for Insurance Resolutions...	80.00
	Express .. . . .	.45
	*H.L.Koehler Mfg. Co., 1 Autograph Stamp ..	2.75
	4 Rubber Stamps .. . . .	.80
	1 No. 4 Checker and Dates	1.75
	1 No. 0 Pad .. . . .	.35
	*Express	2.45
	*1,000 2c Stamps	20.00
	Express .. . . .	.35
	Express and Freight	2.45
	W.R.Speck, P.M., Printed Stamped Envelopes.	43.10
	Express	13.88
	Expenses to Louisville, 2 trips	3.00
	Voucher Check No. 7	20.55
	Bertha Backus, 15 Days' Services as Stenographer	
	Voucher Check No. 8	4.55
	McClure & Bronston,	
	200 Postals	3.00
	3 Doz. Pens .. . . .	.25
	2 Note Books .. . . .	.25
	1 Bottle Paste .. . . .	.25
	1 Cushion Stamp .. . . .	.70
	1 Box Clips .. . . .	.10
	Voucher Check No. 9	16.20
	W. B. McClure,	
	Postage Stamps	15.00
	Express Treasurer's Books to Louisville, ..	.40
	Same from Louisville .. . . .	.30
	Express Treas. Books from Bowling Green..	.50
Dec. 5.	Voucher Check No. 10	62.10
	A. T. McCormack,	
	*Express on Typewriter	2.55
	Express on Cards from Globe Wernicke Co. ...	.50
	Express on Name Plates from Addressograph	
	Company .. . . .	.25
	Express on Book from Dr. Bullitt .. . . .	.40
	*500 Postal Cards	5.00
	Express on Cuts .. . . .	.35
	Express Name Plates from Addressograph C...	.25
	November Salary	50.00
	*Freight	2.00
	Express .. . . .	.80
Nov. 27.	Voucher Check No. 11	288.10
	H. Kaplan Advertising Commissions,	
Dec. 5.	Voucher Check No. 13	41.67
	Bertha Backus, November Salary,	
	Voucher Check No. 14	3.86
	Globe Wernicke Company,	
	1 M. Ledger Cards	2.25
	119 County Guides	1.31
	1 Set Cards A—Z .. . . .	.30
	Voucher Check No. 16	2.82
	Addressograph Company,	
	75 Plates .. . . .	.75
	53 Plates .. . . .	.53
	154 Plates	1.54

Jan. 5.	Voucher Check No. 17	117.83
	A. T. McCormack,	
	Freight on Folder	1.45
	Express on Addressograph Plates	1.70
	Express on Cuts forwarded from Louisville....	.30
	Express on Globe Wernicke Cards .. . . .	.35
	*Mail, December Journal	6.66
	*500 2c No. 8 Stamped Envelopes	10.90
	*2,000 2c No. 13 Stamped Envelopes.....	42.80
	Freight on Cases .. . . .	.50
	*Telegrams, Medical Journal	3.17
	December Salary	50.00
	Voucher Check No. 18	6.25
	L. H. South, Advertising Commissions....	
	Voucher Check No. 19	150.00
	Fred C. Zappfe,	
	Reporting and Transacting Proceedings and Dis-	
	cussions Owensboro Meeting.	
Jan. 5.	Voucher Check No. 20	6.00
	News Publishing Co., Printing 4,000 Postals,	
	both sides, Insurance Agreement.	
	Voucher Check No. 21	3.72
	Globe Wernicke Co.,	
	12 sets 1-31 Cards	3.60
	1 Set Month Cards .....	.12
	Voucher Check No. 22	38.85
	George G. Fetter Company,	
	3 No. 1701 L B X Units No. 299	36.00
	1 No. 1701 L B X Top No. 299	3.75
	1 No. 2501 H. D. Base No. 299	25.00
	By advertisement	\$25.90
1906,		
Dec. 19.	Voucher Check No. 23	62.50
	Henry Kaplan, Advertising Commissions,	
Dec. 20.	Voucher Check No. 24	53.75
	Oliver Typewriter Company,	
	1 Oliver Typewriter	100.00
	Less Spot Cash Discount	13.25
	By Advertising to be Taken	33.00
1907,		
Jan. 5.	Voucher Check No. 25	141.38
	F. C. Nunemacher,	
	2,000 Medical Journals for November, 48 Pages	
	Mfg. and Material	116.00
	44 Hours Corrections and Alterations at 60c....	26.40
	Stamps and Postage	7.98
	By Addressing Wrappers	3.00
	Less for White Cover	6.00
	Voucher Check No. 26	69.00
	Times-Journal Publishing Co.,	
	350 Circular Letters to Newspapers, Insurance	
	Matter	2.00
	5,000 Circulars—Insurance Resolutions.. . . .	8.75
	2,000 Linen Letter Heads—Secretary's Office. .	6.50
	1,000 Blank Sheets, Linen	2.00
	500 Advertising Contracts	1.75
	500 Blank Letter Heads	1.00
	400 Postal Cards and Printing, Advertisers....	5.25
	100 Return Postals and Printing—County So-	
	cieties....	3.00

Jan. 22.	Voucher Check No. 35		16.66
	Fidelity and Deposit Co., of Maryland, \$5,000 Bond for W. B. McClure as Treasurer Kentucky State Medical Association.		
1907,			
Feb. 5.	Voucher Check No. 36.		210.50
	Times-Journal Publishing Co.,		
	2,000 Letter Heads—Secretary	6.00	
	1,500 Blank Envelopes	2.25	
	Printing 2,500 Envelopes for mailing Journal... .	2.25	
	2,500 Copies February Journal, 64 pages.....	201.75	
	By Typographical Errors		1.75
Voucher	Check No. 37		41.67
	Bertha Backus, January Salary,		
March 5.	Voucher Check No. 38		66.23
	A. T. McCormack,		
	Expenses, Louisville	3.25	
	Expenses, Glasgow . . . . .	.90	
	Freight and Drayage Addressograph	1.41	
	Express Addressograph Plates . . . . .	.60	
	Postage, Book . . . . .	.25	
	*Postage, March Journal, 930 lbs.	9.30	
	Postage, March Journal, 26 local copies.....	.52	
	February Salary	50.00	
Voucher	Check No. 39...		3.64
	Henry L. Koehler Mfg. Co., 7 Department		
	Rubber Stamps for Journal	1.14	
	1 No. 2 1-2 Self Inker with Autograph D.M.Grif- fith	2.50	
	Voucher Check No. 40		3.48
	Addressograph Co., 348 Addresses at 1c each		
	Voucher Check No. 41		246.25
	Times-Journal Publishing Co.,		
	2,500 Copies March Issue, 80 pages	252.50	
	2,500 Printed Envelopes	2.25	
	By Error in Locating Ky. School of Medicine Ad.		5.00
	By 14 Typographical Errors		3.50
	Voucher Check No. 42		41.67
	Bertha Backus, February Salary,		
April 5.	Voucher Check No. 43		3.12
	Paul Cooksey, Com. for Collecting Carnrick bill.		
	Voucher Check No. 44		93.70
	A. T. McCormack,		
	Express Addressograph Plates . . . . .	.45	
	*4,000 2c Stamped Envelopes	42.80	
	Express on Cuts . . . . .	.45	
	March Salary	50.00	
	Voucher Check No. 45		252.40
	Times-Journal Publishing Co.,		
	2,500 Copies April Journal, 80 pages	225.50	
	2,500 Envelopes—Printing	2.25	
	By 3 Typographical Errors . . . . .		.75
	By 1-2 Day's Delay		5.00
	2,000 Blank Envelopes	3.00	
	1,000 Slip Sheets . . . . .	.40	
April 5.	Voucher Check No. 46		41.67
	Bertha Backus, March Salary,		
May 5.	Voucher Check No. 47		64.79
	A. T. McCormack,		

	*Postage, April Journal	10.05	
	*Postage, May Journal	7.44	
	April Salary	50.00	
	Voucher Check No. 48		204.82
	Times-Journal Publishing Co.,		
	Printing 2,000 Envelopes for Journal.....	2.00	
	Printing 1,000 Letters, Secretary ..	2.00	
	1,000 Blank Sheets	2.25	
	190 Double Postals and Printing to be Paid		
	by B. & O.	5.80	
	2,000 May Journals, 80 pages	207.00	
	By 21 Typographical Errors at 25c		5.25
	By 94 Journals Short, and 74 Letters		8.98
	Voucher Check No. 49		41.67
	Bertha Backus, April Salary,		
May 7.	Voucher Check No. 50		2.00
	S. S. Amerson, Fee sent by Mistake to Secretary		
	Instead of to Dr. J. W. Conway, County Seere-		
	tary Union County Med. Society		
June 5.	Voucher Check No. 51		135.60
	A. T. McCormack,		
	*4,000 2c Stamped Envelopes	85.60	
	May Salary	50.00	
	Voucher Check No. 52		1.50
	American Medical Association 25 Blank Charters		
	for County Societies		
	Voucher Check No. 53 .....		.55
	Addressograph Co., 43 Plates and Postage,		
	Voucher Check No. 54		41.67
	Bertha Backus, May Salary,		
	Voucher Check No. 55		288.95
	Times-Journal Publishing Co.,		
	Balance on Envelopes	2.00	
	1,000 Blank Envelopes	1.50	
	June Journal, 2,100 copies, 80 pages.....	216.10	
	Printing Envelopes for June Journal	2.00	
	1,000 Letter Heads—Sec'ty's Office	4.00	
	1,000 Blanks	2.25	
	500 Letter Heads—D. C. Bowen	2.50	
	Express on Same .....	.35	
	By 7 Typographical Errors		1.75
July 5.	Voucher Check No. 56		58.00
	A. T. McCormack,		
	* Postage June Journal	8.00	
	June Salary	50.00	
August 5.	Voucher Check No. 57 .....		.99
	Addressograph Co., 36 Addresses .....	.36	
	Postage .....	.09	
	44 Addresses .....	.44	
	Postage .....	.10	
July 5.	Voucher Check No. 58		223.45
	Times-Journal Publishing Co.,		
	2,250 Copies July Journal, 80 pages	229.25	
	2 pages Supplement—No charge.		
	2,250 Printed Envelopes for Journal	2.15	
	500 Blank Envelopes .....	.80	
	By 5 Typographical Errors		3.75
	By 1-2 Day's Delay		5.00
July 5.	Voucher Check No. 59		41.67
	Bertha Backus, June Salary		

August 5.	Voucher Check No. 60	60.27
	A. T. McCormack,	
	*Postage, July Journal	7.77
	*250 Postals	2.50
	July Salary	50.00
	Voucher Check No. 61	2.00
	Kentucky Medical Journal Subscriptions, Drs. Dora Wheat and Miss Ethel Alams, credited to Association Account.	
	Voucher Check No. 62	7.50
	McClure & Bronston, 1,000 Stamped Envelopes for Treasurer's Office	6.00
	Changing Die	1.50
	Voucher Check No. 63	223.05
	Times-Journal Publishing Co.,	
	500 Blank Envelopes	.80
	2,000 20-lb. Letter Heads	7.00
	2,500 copies Aug. Journal, 80 pages	252.50
	Printing 2,500 Envelopes	2.25
	By 88 Typographical Errors in Journal at 25c.	22.00
	By 1 1-2 Days' Delay in issuing Journal	15.00
	By Omission Nurses' Register	2.50
	Voucher Check No. 64	41.67
	Bertha Backus, July Salary,	
Sept. 5.	Voucher Check No. 65	63.89
	A. T. McCormack,	
	Postage August Journal	11.43
	Express on Griffith Inserts	1.46
	August Salary	50.00
	100 Postals	1.00
September 5.	Voucher Check No. 66	16.50
	American Medical Association 3,600 Engraved Inserts for October Journal.	
	Voucher Check No. 67	254.05
	Times-Journal Publishing Co.,	
	500 Blank Envelopes	.80
	2,500 Copies, 80 pages, Sept. Journal	252.00
	Printing 2,500 Envelopes	2.25
	By 4 Typographical Errors	1.00
	Voucher Check No. 68	41.67
	Bertha Backus, August Salary,	
October 5.	Voucher Check No. 69	59.63
	A. T. McCormack,	
	Postage Sept. Journal	9.63
	September Salary	50.00
	Voucher Check No. 70	401.00
	Times-Journal Publishing Co.,	
	3,500 Oct. Journals, 96 pages	398.00
	3,500 Envelopes, Oct. Journal	3.00
	Voucher Check No. 34	1.00
	L. H. South, Commission on Subscriptions.	
	Voucher Check No. 71	41.67
	Bertha Backus, September Salary.	
		<hr/> 5,491.84

INVOICE OF PROPERTY OF ASSOCIATION	Typewriter	100.00
Addressograph with 4821 Complete Ad-	Cuts	2.75
dress Plates	Typewriter Cabinet	33.00
Folding Machine	Typewriter Chair	8.00

Rubber Stamps	8.29	200 No. 13 2c Stamped Envelopes	4.28
600 Ledger Cards	1.35	Blank Paper	6.50
Guide Cards	5.32	Letter Heads	2.50
Globe Wernicke Filing Cases	64.75	Report Blanks	10.00
23 Blank Charters for County Societies. .	1.42		
2750 No. 8 2s Stamped Envelopes	58.85	Total	813.53

List of Cash Receipts From County Societies.

November 1, 1906, to October 1, 1907.

Adair	28.00	Daviess	134.00
Allen	24.00	Estill	18.00
Anderson	30.00	Fayette	100.00
Ballard	47.00	Fleming	30.00
Barren	42.00	Franklin	42.00
Bath	32.00	Fulton	30.00
Bell	26.00	Gallatin	2.00
Boone	6.50	Garrard	18.00
Bourbon	42.00	Grant	26.00
Boyd	34.00	Graves	42.00
Boyle	30.00	Grayson	42.00
Bracken	26.00	Green	18.00
Breathitt	10.00	Hancock	8.00
Breckenridge	28.00	Hardin	56.00
Bullitt	32.00	Harlan	8.00
Butler	32.00	Harrison	56.00
Caldwell	48.00	Hart	36.00
Calloway	36.00	Henderson	56.00
Campbell-Kenton	30.00	Henry	39.00
Carlisle	34.00	Hickman	36.00
Carroll	24.00	Hopkins	40.00
Casey	30.00	Jackson	2.00
Christian	66.00	Jefferson	428.00
Clark	24.00	Jessamine	22.00
Clay	18.00	Knox	24.00
Clinton	18.00	LaRue	14.00
Crittenden	24.00	Laurel	18.00
Cumberland	22.00	Lawrence	2.00

Lee	12.00	Powell	22.00
Letcher	6.00	Pulaski	48.00
Lewis	5.00	Robertson	6.00
Lincoln	38.00	Rockcastle	22.00
Livingston	4.00	Rowan	18.00
Logan	50.00	Russell	16.00
McCracken	76.00	Scott	36.00
McLean	10.00	Shelby	36.00
Madison	36.00	Simpson	20.00
Marion	39.00	Spencer	2.00
Marshall	22.00	Taylor	16.00
Mason	32.00	Todd	42.00
Meade	16.00	Trigg	28.00
Menifee	2.00	Trimble	18.00
Mercer	20.00	Union	54.00
Monroe	34.00	Warren	110.00
Metcalf	22.00	Washington	28.00
Montgomery	16.00	Wayne	19.00
Morgan	14.00	Whitley	16.00
Muhlenburg	32.00	Wolfe	18.00
Nelson	42.00	Woodford	24.00
Nicholas	26.00	Delinquent Col-	
Ohio	42.00	lections, 1906 . .	99.00
Oldham	24.00	Cash for Treas-	
Owen	22.00	urer's Bond . . .	16.66
Owsley	10.00	Cash	6.00
Pendleton	30.00		
Pike	24.00	Total	3,707.16

Treasurer's Checks, Accompanied By Vouchers,

Issued During Oct., 1906, O. K.'d by

J. B. Bullitt.

Treasurer's Check No. 1, James B. Bullitt.	50.00
T. C. No. 2, Hattie Belle Kemp	41.67
T. C. No. 3, Ben L. Bruner	21.90
T. C. No. 4, J. Garland Sherrill	14.95
T. C. No. 5, F. C. Nunemacher	182.24
T. C. No. 6, Hattie Belle Kemp	26.65
T. C. No. 7, W. B. McClure	216.00
T. C. No. 8, R. C. Calhoun	30.00
T. C. No. 9, R. C. McChord	6.50
T. C. No. 10, A. T. McCormack	30.00
T. C. No. 11, J. T. Wesley	73.50
T. C. No. 12, G. E. Cecil	26.67
T. C. No. 13, C. Z. Aud	73.50

Treasurer's Check No. 14, R. C. Daniel . .	4.50
T. C. No. 15, Charles M. Rodman	4.50
T. C. No. 16, I. A. Shirley	40.70
T. C. No. 17, W. W. Richmond	31.00
T. C. No. 18, Carrie B. Boston	4.50
T. C. No. 19, D. M. Griffith	65.75
T. C. No. 20, J. E. Wells	36.80
T. C. No. 21, D. C. Bowen	48.05
T. C. No. 22, Third National Bank	34.37

Total 1,063.75

Petty Cash Expenses, Dr. Bullitt's Office. . 23.51

By Amount Turned Over to Incoming Sec. 17.37

Total 40.88

Grand total 1,104.63

SECRETARY'S MONTHLY BALANCE SHEET, AGREEING WITH THE BOOKS.

1906		Expenses	Collections	Balance
Nov. 1.	Balance on Hand			2,237.28
Nov. 1.	To Treasurer's Checks Outstanding	91.67		2,145.61
Nov. 9.	By Cash in Dr. Bullitt's Hands		17.37	2,162.98
Nov. 5.	October	334.98	385.39	2,213.39
Dec. 5.	November	398.55	76.65	1,891.49
Jan. 5.	December	1,155.30	489.33	1,225.52
Feb. 5.	January	496.92	681.17	1,409.77
March 5.	February	361.27	634.56	1,683.06
April 5.	March	390.89	580.87	1,873.04
May 5.	April	313.98	506.95	2,066.01
June 5.	May	410.27	535.45	2,191.19
July 5.	June	323.12	1,025.49	2,893.56
Aug. 5.	July	335.48	815.18	3,373.26
Sept. 5.	August	376.11	412.98	3,410.13
Oct. 1.	September	503.30	465.25	3,372.09

Collections by Editor on Account Kentucky Medical Journal, Corresponding with Checks For Even Amounts Filed Herewith.

Collections by Secretary on Account of Kentucky State Medical Association, Corresponding With Checks For Even Amounts Filed Herewith.

1906.	By Check
Nov. 1...	293.39
Dec. 1...	45.65
1907.	
Jan. 2...	271.33
Feb. 1...	314.51
March 1...	420.56
April 1...	282.87
May 1...	168.96
June 1...	233.45
July 1...	271.49
Aug. 1...	100.68
Sept. 1...	184.98
Oct. 1...	314.25
Total	2,902.12

1906.	By Check
Nov. 1...	92.00
Dec. 1...	31.00
1907.	
Jan. 2...	218.00
Feb. 1...	366.66
March 1...	214.00
April 1...	298.00
May 1...	338.00
June 1...	302.00
July 1...	754.00
Aug. 1...	714.50
Sept. 1...	228.00
Oct. 1...	151.00
Total	3,707.16

Total receipts 6.609.28

CLINICS AT STATE MEETING.

During the meeting of the State Association in Louisville, Dr. Hibbitt, Chairman of the Committee on Clinics, announces that he has arranged Operative Clinics every morning. Medical Clinics and those in Diseases of the Eye, Ear, Nose and Throat are also being arranged, and will be made so that Friday and Saturday, the 18th and 19th, will be special clinic days, and members of the Association are especially urged to arrange to remain for them. On Monday, the 14th, there will also be a number of clinics arranged. It is suggested that members arriving in town on Monday, or early Tuesday morning, telephone the Secretary, C. W. Hibbitt, whose number on the Cumberland 'phone is

South 1459, and he can inform them exactly where to go. The profession of Louisville and Jefferson County are bending every energy to make this the most interesting and instructive session of the Association which has ever been held, and indications all over Kentucky point to the fact that the response from the profession out in the State will be great.

(Continued from Third Page.)

150 mg. per pill would dissolve. As this indicated a shortage of nearly 50 per cent. and demonstrated that the published formula was not correct, your committee deemed it of interest to the profession to determine

(Continued on Page xxv.)

Written for Dec No. no copy

KENTUCKY

MEDICAL

JOURNAL



NOV. 4-1907

Being the Journal of the Kentucky State Medical Association.

Published Monthly under Supervision of the Council.

Editorial and Business Office, Corner State and Twelfth Streets.

Entered as second-class matter October 22, 1906 at the Post-office at Bowling Green, Ky., under the Act of Congress March 3, 1879.

VOL. V.

BOWLING GREEN, KY., NOVEMBER, 1907.

No. 10

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Where Lithia is prescribed, Cystogen is indicated.

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gonorrhea. A good urinary antiseptic during convalescence from typhoid and scarlet fever.

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Cystogen—5 grain Tablets.

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Cystogen-Aperient (Granular Effervescent Salt
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CYSTOGEN CHEMICAL CO., St. Louis, U. S. A.

KENTUCKY MEDICAL JOURNAL.

BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION.

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V. E. SIMPSON AND T. C. HOLLOWAY

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NOVEMBER, 1907.

\$2.00 YEARLY.

OUR ANNUAL SESSION.

Every physician in Kentucky may feel a pardonable pride in the Louisville meeting of our State Medical Association. Not only was the registered attendance—641—probably greater than that of any State meeting ever held in this or any other State, but what is vastly more important, the professional enthusiasm and *esprit de corps* of all those present were splendid. We may safely say that the great medical profession of Kentucky has reached that point in its own house cleaning and house keeping where actual results are being shown. The reports of the delegates at the first night session, published elsewhere in this issue, all tell in one way or another the same story. In many counties the society is still merely a paper organization, with only enough strength to pay their paltry dues. In the vast majority, actual work and real progress have already been made, and enthusiastic, self-sacrificing men in every section of the State realize now as never before that the greatest possible good can be accomplished, not only for ourselves, but for our patrons, the good people of Kentucky by good, hard work in our county societies.

Nowhere else is the spirit more manifest than in that greatest of our component societies—that of Jefferson county. Every member from out in the State was made to feel a welcome, a real pleasure at his being present. From the moment of her distinguished Mayor's address of welcome until the last tap of the President's gavel, every one felt impressed that each and every one of the 236 members of this society were acting as a continuous committee on entertainment. A special resolution extending the Association's thanks to President Meyers and

his society was unanimously adopted in the General Session.

Every delegate and officer returned home filled with a strange, new enthusiasm, all determined that even the magnificent work done in 1907 should be but play compared with what shall be done in 1908. At the Winchester session next year, it will be glorious to hear of hopes, now just made, then realized, of plans then completed, of the real labor of our devoted band of workers. Which society shall make the best report? Four have already sent in their 1908 dues. You will be compelled to hurry to keep up with the leaders, when all are striving to be leaders.

DR. SIMMONS.

Probably no other one thing contributed so much to the real value of our great meeting as the presence and co-operation of the Secretary of the American Medical Association, the editor of its great *Journal*. Dr. Simmons' great work for the American profession, his untiring, unremittent work, work for higher ideals and higher accomplishments for American physicians had already given him our admiration. His personal presence, his splendid address, his wise counsel, his cordial, sincere commendation of our Association, have made of us his devoted supporters and loyal friends. Elected an honorary life member by a rising vote of every member present, we attempted to convey to him, and through him to all the sixty thousand organized physicians in America our support of every principle with which his name is identified. As one of our own members, we shall feel free to call on him for assistance and advice whenever necessary, and we want him to feel that he, as much as any other one of our 1900 members, is responsible for

what we do, and must, therefore, do his share of the great work he has helped to plan for us. All honor to George H. Simmons, the great leader of our profession!

THIS YEAR'S FIGHT.

Having the insurance fight won, excepting only as against the New York Life, which is practically out of business in the State, our best energies, as individuals and as an organization are to be devoted this year, by direction of the House of Delegates, to securing pure drugs and to ridding ourselves of nostrums. The resolutions published herewith are direct and to the point. No doubt is left as to their meaning. It is particularly urged that you refuse to receive from the post office, copies of trade journals. Many of the great pharmaceutical houses get out such sheets and send them free to physicians, hoping to lure them into the use of their specialties. Most of these specialties, and all such so-called journals are conceived in fraud and brought forth in iniquity. Refuse to accept them and thus help to kill them.

Next, look through the pages of every medical journal to which you subscribe, whether it belongs to a State or other organization, or is supported by the members of the National Proprietary Association, the patent medicine vendors' collusive family or what not, and if you find the nauseating advertisements of the blatant frauds already exposed by the Council on Pharmacy and Chemistry, write a personal letter to the editor, the publisher and each collaborator, calling their attention to such frauds. Do not talk about it! Write, and write to-day, and help to save our honorable profession from the vampires who exploit it, to its own shame and dishonor.

In addition to this we have arranged with the American Medical Association to keep a supply of the Manual of the Pharmacopeia and the National Formulary, recently prepared by Mr. Hallberg, on hand in our JOURNAL office. Send 50 cents in money or stamps, and by return mail we will send you not only this valuable book, but also the latest revision of the List of New and Non-Official Remedies approved by the Council on Pharmacy and Chemistry of the American Medical Association. In one of these two books will be found every medical agent necessary to any intelligent doctor. As suggested by one member at this meeting, let each of us get these little books and learn the honest remedies, that it may not be necessary to rely on the nostrums, and our own ignorance.

Read these resolutions carefully, and, by

the same concert of action as won the insurance fight, do your best share toward winning this one. "United we stand, divided we fall!"

COMMITTEE ON PHARMACOLOGY.

Whereas, the American Medical Association has established a Council on Pharmacy and Chemistry, composed of scientists of world wide reputation and standing, whose function is to examine pharmaceutical products in order to be able to inform the profession as to the actual composition of said products, and,

Whereas, after careful examination of many hundreds of said products, it has officially announced its approval of a large number of them, and, in order to make clear to the profession the methods and purposes of their work, have published exposures of a large number of the fraudulent preparations that have been foisted on the members of the profession and, through them, on the public by interested owners and manufacturers, frequently laymen, ignorant of the use of drugs, except their meretricious use, as examples of the much larger number which they have found of little or no value, or positively harmful, and,

Whereas, we believe that every physician in Kentucky is vitally interested in the work of this Council and desires in every possible way to promote its usefulness and interest, and,

Whereas, the greatest aid to the nostrum manufacturers in their nefarious and avaricious work has been the medical press, whether controlled by medical organizations, individual members of the profession or interested lay-firms, and,

Whereas, we believe the time has arrived when the great profession of medicine, and all agencies controlled by it, should divorce itself permanently, finally and forever from those interests which, like ghouls, prey upon the sick and afflicted through the commercial sale of nostrums and dishonest, so-called proprietary, medicines, now, therefore,

Be It Further Resolved, that, in pursuance Medical Association, in annual session assembled, that we heartily endorse the formation of the Council on Pharmacy and Chemistry, that we extend it our confidence and congratulations on the splendid work already accomplished, and that we pledge it our unanimous support in its purpose of freeing our profession and its publications from nostrum control, and,

Be it Further Resolved, that, in pursuance of this object, we request each county society in Kentucky to devote a special session to

consideration of this important question with a view to securing the active aid of every licensed practitioner in this State, and that the Council of this Association be requested to omit from the advertising columns of our JOURNAL all pharmaceutical preparations which are not manufactured in conformity with the U. S. Pharmacopoea or the National Formulary until they have been approved by the Council on Pharmacy and Chemistry of the American Medical Association; and,

Be it Resolved, that we request every physician in Kentucky to secure a copy of the abridged U. S. Pharmacopoea and Formulary and be guided by this and the approval of the Council on Pharmacy in its remedies.*

Be it Further Resolved, that our Council be directed to communicate with the editors, owners, collaborators and publishers of the medical journals of this country on this subject, and to announce to the profession of Kentucky, through the columns of our JOURNAL such publications as are willing to assist the profession by freeing their columns of nostrum advertising, and we hereby pledge our support to such journals even if they find it necessary to increase their subscription rate, and, further,

Be it Resolved, that we expressly condemn the publication of so-called medical journals by interested manufacturers of nostrums, and request the profession of the State to decline to receive them.

THE HOUSE OF DELEGATES.

Read the proceedings of the House of Delegates carefully. Remember you are responsible for the success or failure of what they do. All of its good work can not be published in this issue, but watch our columns this month and next, and you will get enough to more than repay you for all the good work each of you have done for our profession. A large majority of the elected delegates were present in Louisville. The debates were excellent, the action, in every case, unanimous. Let us make all this practical by each doing his part.

INSURANCE

Whereas, all of the great life insurance companies except the New York Life Insurance Company, have either maintained or restored the minimum fee of \$5 for each medical examination for life insurance as earnestly insisted upon by this Association at its

Owensboro session of last year, and endorsed, after careful investigation, by the American Medical Association, and by a larger majority of the State and county organizations, and

Whereas, the New York Life Insurance Company, over the signature of its officials, announces that it will not restore the reasonable minimum fee demanded by nearly every physician competent to make a medical examination, and,

Whereas, this company is attempting to further injure the profession by making varying contracts with its weaker and more ignorant members, paying in some cities \$2.50 for examinations, and in other places, *where they have no agents*, guaranteeing a fixed income of from \$25 to \$100 a month to men notoriously below the standard of insurance examiners of reputable companies; therefore,

Be It Resolved, by the Kentucky State Medical Association, in annual session assembled, that for each medical examination for life insurance the minimum fee shall be \$5; that we unqualifiedly condemn any licensed practitioner who accepts such responsible work for a smaller fee as guilty of a breach of professional courtesy as well as of sound business judgment, and, further,

Be It Resolved, that it is derogatory to the dignity of a physician to accept service in such a company, notoriously antagonistic to the welfare and best interests of our profession, that reputable insurance companies and other organizations needing and employing competent medical advisers be requested not to employ them, that they should not be recommended for medical appointment to political and other preferments nor at all by the members of this Association or its constituent county societies, and, further,

Be It Resolved, that while we deprecate any attempt to make such matters a test of society membership, especially as these men belong to a class in need of the education and uplift which county societies are designed to give, we urge each county society to discuss this question at its next session so that no one of its members may fail to understand that it is considered distinctly inimical to the best interests of the profession to be associated in any manner with the New York Life Insurance Company, the only company publicly proven to be honey-combed with corruption and dishonesty by the Hughes investigation which is still under the control and direction of practically the same officers as before, and which still insists upon this policy of injustice to the medical profession.

* Copies can be had from the Kentucky Medical Journal Bowling Green, Ky., for 50 cents each.

INSURANCE.

Whereas, the four life insurance companies organized and chartered in the State of Kentucky have honored their medical examiners by excluding from their lists names of physicians willing to work for the cut-rate companies and granting them reasonable remuneration for their services.

Be It Resolved, that this Association extend its thanks in confidence to the medical directors and other officials of the Citizens Life Insurance Company, the Commonwealth Life Insurance Company, the Business Men's Life Insurance Company and the Inter-Southern Life Insurance Company, and pledge them our continued support in their efforts to build up home institutions to carry insurance upon the lives of our people.

Moved that this Association shall extend its congratulations to the new officers of the Equitable Life Assurance Society of New York, and the Mutual Life Insurance Company of New York on the evidences of economy and good management in their recent statements, that we extend them, and especially Presidents Morton and Peabody, Vice President White and Dr. Symonds, our congratulations and best wishes in their future work.

SCIENTIFIC EDITORIALS.

THE PUERPERIUM. — CARE OF THE MOTHER.

BY EDWARD SPEIDEL.

The puerperium comprises the time generally conceded to be necessary to bring about a proper involution of all the structures that change during the period of gestation and for a thorough understanding of its scope, it is well to remember, that not only is the uterus enormously enlarged, but the ligaments, the vagina and the muscles of the abdominal wall are overstretched and distended. In addition to this, there is an accumulation of fat throughout the body and more or less oedema of the lower extremities in consequence of interference with the venous circulation.

According to Peterson, a woman loses from 1-13 to 1-10 of her weight, irrespective of the weight of the child, in the first two weeks of the lying-in period. The uterus at the end of labor, weighs about 21 ounces, and this should be reduced to 2 ounces at the end of the puerperium. Whether or not this involution can be best attained by the enforced rest and quiet and dietary restrictions that have been customary in the conduct of the puerperium, or whether the same object can be accom-

plished without detriment to the woman by allowing her to get out of bed and be about in a very short time, has become a subject for discussion.

Kuestner of Breslau, brought the matter to the attention of the medical profession, by stating that in the maternity in his charge, women had been allowed to get up on the fourth or fifth day, and leave the hospital at the end of a week.

It will be remembered in this connection, that Drs. Boldt, of New York, and Riis, of Chicago, advocate even a more radical practice in the after treatment of celiotomy cases, allowing the patient to get out of bed, the day after an operation and to eat anything they like after nausea from the anesthetic has passed off.

According to the discussion in the medical press, this practice receives no authoritative support. It is contended, that such a procedure is certain to be followed by more hernias and in those cases where union of the abdominal structures is tardy, it may result in a dangerous protrusion of the intestines through the ruptured abdomen. But the best argument against the practice, is undoubtedly the statement that the majority of the women that undergo these operations are neurotic, hyperaesthetic and sexually abused patients, for whom the enforced rest and quiet after an operation, is surely as beneficial as the operation itself.

The same argument to a lesser degree will hold good in the conduct of the puerperium. We have there also in many instances, the neurotic woman and in the so-called civilized woman, we also have the sexually abused woman, for it is a well known fact, that in many instances coitus is practiced with more or less discretion until the very day of delivery.

The Indian squaw is cited as an example of a woman who gives birth to a child, with very little discomfort, bathes in a stream, then joins the tribe at once and continues her ordinary duties without interruption. If any obstetrician wishes to leave his patient in the condition in which you find such an Indian woman after a few labors, generally with completely prolapsed uterus, then he is welcome to use such instances as an argument.

Suffice it to say, that it should be the duty of the up-to-date physician, to conduct the puerperium in such a way, as best to bring about the return of the patient's entire body to as nearly the condition as existed before conception. This means in addition to a proper involution of the organs most concerned, a preservation of the patient's figure.

According to our present ideas at least, all this can best be accomplished by rest and quiet and in the manner about to be described.

After the delivery and inspection of the placenta, and the administration of the routine dose of ergot, the patient should be turned over to the nurse, or in the absence of a nurse, to some kindly neighbor. The occasion should be extremely rare, when a doctor is called upon to give the patient the attentions that are now necessary. The patient should be changed at once in an ordinary labor, as she can not possibly rest comfortably in the condition in which she is left at the end of the third stage. Besides, she is more liable to suffer from the post partem chill that may naturally be expected after a labor and which is due to the great muscular effort and excessive sweating, incident to the labor. If the patient is cleansed carefully, dressed in dry clothing and carefully covered with a warmed blanket during and after the manipulation, then she may escape the chill entirely. It is well to caution the nurse, to hold the uterus with the hand laid upon the abdomen, if it become necessary to turn the patient to the side, a sudden dropping of the uterus from one side of the abdomen to the other, could result in the aspiration of air into its cavity and the sudden death of the patient from air embolism. This precaution should be used at least for the first six hours after delivery, thereafter it is unnecessary.

It is conceded by practically all the authorities, that the abdominal binder serves a useful purpose at least in the first week of the puerperium. It furnishes a means for the attachment of the lochia pad. It supports the relaxed abdominal wall, prevents the undue movements of its contents upon a change of position and relieves the depressing sensation, consequent upon the sudden removal of such a large tumor from the abdomen.

The breast binder also serves a useful purpose in supporting the breasts, protecting them from the friction of starched night gowns and especially from the sand papering that the nipples are sometimes subjected to when the patient wears the belaced and be-ribboned affair distinctive of high society. The breast binder will check to a great extent, the sudden accumulation of milk, liable to take place on the third day.

Properly cleansed, with the abdominal bandage, and breast binder in place and the vulva covered with a clean pad, the patient in a clean gown, and the bed freshly dressed, the patient should enter upon the puerperium under the most auspicious circumstances.

The physician should retain absolute control of the case under all circumstances. Even if a trained nurse is in attendance, he must remember that the responsibility is his.

He should time his visits in such a way, as to be able to meet any complications that may arise. His first visit should be made, within 12 hours, then upon the second, third, fifth, seventh and ninth day, when under ordinary circumstances unless the patient expects and is willing to pay for special attention, the case may be dismissed. Stringent rules should be given in regard to visitors, it being best under all circumstances, to restrict them to the husband and some near relative of the patient. The custom of dragging the baby out of its crib a dozen times a day for the edification of the admiring relatives, is a dangerous practice and can at best only result in causing a restless night.

The room should be light and airy. The direct light can easily be kept out of the eyes of the mother and child, by a screen placed judiciously.

The mother should be cautioned as to sudden and violent movements, which might result in syncope and even death. She should refrain from reading and fancy work, at least for the first two weeks of the puerperium.

The temperature and pulse should be taken three times daily if possible. In consequence of the severe strain to which the patient has been subjected during the labor, the excitement generally attending it and the absorption of a large amount of effete material into her system, the temperature generally vacillates in the first 24 to 48 hours, the various authorities allowing limitations of from 99.1-2 to 100.5. It should be remembered however, that this refers to transient elevations. According to Zweifel, a continuous axillary temperature of 99.5 to 100 should be considered pathological and the wise obstetrician will go on an early hunt for the cause of the trouble. As a rule, the pulse of the lying-in woman is slower than normal, a pulse of 60 being not unusual. Immediately after labor, it is generally accelerated in consequence of the unusual excitement and exertion under which the patient has been laboring. If it does not slow down in a comparatively short time, then the patient needs watching as this is often a warning, of an impending post partem hemorrhage. In the following days of the puerperium, an acceleration of the pulse even without a rise of temperature, should arouse suspicion, as it is one of the first evidences of a puerperal infection.

The slow pulse in the puerperal woman is accounted for, by the lessened intra-abdominal pressure and by the stasis, occurring in the abdominal veins in consequence of the evacuation of the uterus.

Micturition is often interfered with, because in consequence of the lax abdominal walls, the bladder easily becomes over distended, then often a slight dribbling of the urine is followed by sharp cutting pains, as it comes in contact with some abrasion of the vulva and involuntary retention follows. In spite of the excessive sweating that occurs during the puerperium, the formation of milk and the lochial discharge, it has been found that the volume of the urine, is increased, consequently the bladder requires careful watching. If urine has not been passed within 8 or at the most 12 hours after labor, then means should be used to bring about a flow. Splashing water in a basin at the side of the bed, turning on a faucet in the bathroom, so that the patient can hear the sound of the running water, placing hot wet cloths over the vulva, massaging over the symphysis pubis and finally placing the patient in the sitting posture on the bed pan, all these simple expedients should be tried before resorting to the catheter.

The occasions should be very rare when catheterization becomes necessary after an ordinary labor and then it should be performed under full exposure and with a very thorough cleansing of the vestibule, before inserting the sterilized catheter.

The bowels as a general thing do not act spontaneously within a reasonable time. It is supposed, that thorough evacuations have occurred at the time of labor, the food is restricted in the first few days and consequently it is reasonable to wait with the administration of a purgative, until the end of the second day. Castor Oil should be used by preference and thereafter, daily evacuations may be secured, either with the aid of low enemas, or a mild laxative pill. Multipara are very apt to suffer severely with after pains and in such they are generally due to imperfect contraction of the uterine muscle. A few doses of Fluid Ext. of Ergot will generally relieve the condition although at times the pains become so severe, that phenacetin or antipyrin must be used, before relief is obtained. The coal tar antipyretics, however, should be used with caution, as they interfere with proper involution.

In primipara, the presence of after pains to any extent, should excite the suspicion of retention of membranes, or of blood clots in the uterus, and the proper treatment is re-

moval of the offending substances as soon as possible, before they can give rise to more serious trouble.

The external genitals require very careful attention and if the case is not in the hands of a trained nurse, the physician must be especially explicit in his directions. It is very difficult to convince the ordinary nurse or the member of the family that is doing the nursing, this scratching the face after washing the hands, renders them unclean and that the lochial pads should be caught by the edges and not patted with both hands or dropped on the floor before being placed against the vulva. Changing of the pads, should always be performed on a doucne pan. The vulva can then be freely mopped with pledgets of cotton, wet with 1 to 2000 bichloride, without soiling the bed or the patient's gown. The nurse should be taught to notice the characteristics of the lochial discharge, for the patient's progress in convalescence may be determined by the change in color. A persistent bloody discharge, as late as the ninth day, would induce the physician to wait before allowing the patient to leave her bed.

In regulating the diet of the patient, three points should be considered. In the first few days, in consequence of the excessive sweating, the profuse lochial discharge and the formation of milk in the breasts, the diet should largely be fluid, to supply this waste. Consequently, milk, tea and light broths, should be given. After the third day, there should be a gradual return, to the diet that would ordinarily be given to a person lying in bed. Some foods are contra-indicated, because they cause colic in the baby, acid fruits, especially, belong to this class. The patient must be restricted in foods and beverages, that will cause tympanitic distention of the abdomen such as starchy foods and beer. If the intestines become distended from improper food, retraction of the abdominal muscles is prevented and the woman's abdomen will remain permanently enlarged. Most women will be willing to submit to any reasonable restrictions in their diet, if it is explained to them that it will aid in preserving their figure.

Primipara especially are apt to have a great deal of trouble with the breasts. The breast binder will relieve them of much discomfort, that is due to the sagging of the heavy glands, when they become suddenly distended on the third day. When in spite of this, massaging becomes necessary to relieve the distention, then it should be remembered, that the condition is due to a stasis in

the venous circulation of the breast and emptying the veins and not the lacteal ducts, is the most effective procedure. Accordingly, massage the periphery of the gland slowly working towards the center, just the opposite maneuver that was practiced formerly. Too much tampering with the nipples, often leads to trouble. The simplest expedient, simply mopping them with 70% alcohol after each nursing, is probably the best.

The patient should remain on her back the first 24 hours, thereafter she may slowly turn from side to side. After the first week, the assumption of the knee-chest position, for about ten minutes twice daily, will keep the uterus well forward and may prevent the retroflexion that is apt to occur at the end of the second week.

It is customary to allow the patient to get up after the ninth day, if there is no especial contraindication, as a lochial discharge that is still bloody. The patient should be up one hour on the first day and the time increased one hour each day, so that she is practically about in another two weeks, then with another week spent in slowly getting about the house, the time generally allotted to convalescence from a labor is accounted for.

ORATION.

PRESIDENT'S ADDRESS.*

D. M. GRIFFITH, OWENSBORO, KY.

"THE KENTUCKY STATE MEDICAL ASSOCIATION.
IT'S NEEDS, ORGANIZATION AND
AMBITION."

Mr. President and Gentlemen of the Kentucky State Medical Association:—

Past precedent and the order of the day make it my duty and my privilege to deliver the presiding officer's retiring address and to encourage and counsel this Association as to its several needs of to-day and its ambition for the future.

This Association feels highly complimented at having for its guest, Dr. Geo. H. Simmons, the Secretary-Editor of the American Medical Association, and it gives me special pleasure to extend to him, in your behalf, a hearty welcome and to insist that he freely participate in the proceedings of the meeting.

STATE BOARD OF HEALTH.

I commend, in the highest sense, the work of our State Board of Health, both in vouch-

safing protection to the people by preventing the spread of contagious diseases; and providing protection to the profession by demanding a higher standard of intelligence and morality from those who seek to join our ranks.

The trend of modern medical thought is so essentially along the line of prophylaxis rather than curative, that it is eminently proper that the vigorous efforts of our efficient Board continue unabated, in order, that the people may be not only protected but further enlightened and possibly convinced that the protection is real and not imaginary.

In addition it will serve to demonstrate the marvelous progress of the profession, and convince the laity that there is a physical protection by preventing disease, equally as valuable to it as the security against violence assured by the enforcement of the laws of the land.

MEDICAL DEFENSE FUND.

In view of the great number of malpractice suits and the excessively high charges of the indemnity companies, I deem it worthy your time to consider the establishment of a Medical Defense Fund.

This could be accomplished by raising our dues one dollar, which would establish a fund sufficient for the purpose, and according to the experience of other States would not occasion the loss of any material number of members.

This feature of organization commends itself very strongly to my judgment; not alone because it has worked so admirably in other States, but because the members of our calling need the protection it affords. They are exposed, as none others are, to the greedy grasp of those human vampires who seek to take without warrant the diligent doctor's savings.

I feel certain that the cementing influence of mutual interest this fund would create would tend strongly toward eradicating the sentiment that occasions the majority of these suits. When you consider that fully 80 per cent. of all malpractice suits originate in the criticism of doctors and that 90 per cent. are without just and good grounds, you will realize the need of protection on the part of the profession, and advocate such a measure.

That we may defend only the deserving and not those who wantonly neglect or ignorantly injure their patients, I suggest that it obligate the assured to submit his case to a committee of three, selected by this society, to thoroughly investigate, and upon its findings this fund shall or shall not enter the defense. I recommend the appointment of a

*Delivered before the Kentucky State Medical Association, Louisville, October 15, 1907.

committee for a more serious consideration of the subject.

EXPERT TESTIMONY.

We are greatly indebted to the Kentucky State Bar Association for taking the initiative in the important question of improving medical expert testimony. The abuse of expert testimony by designing doctors has become a great reproach to the profession, and a source of much mortification to the well wishers of the calling.

Doctors are noted for their disagreements upon medical questions. Their testimony, upon issues which have been securely settled by the scientific world, is often at such variance as to impair our standing at court. It is indeed a sad and curious commentary on our boasted progress that doctors should be so diametrically opposed in opinions upon definitely determined points, and so viciously antagonistic towards each other when brought into active competition. I therefore recommend that a committee of three, as requested, be appointed to confer with a similar one from the Bar Association.

DISCORD AND DISSENSION A DISGRACE TO THE PROFESSION.

The discord and dissension that so often exist among doctors are, in truth, a disgrace to our progressive profession. Of all the professional men, doctors more than any other, stamp the impress of their personality and their profession upon the community in which they reside. They are supposed to be and are above the average of their race, both mentally and morally, and yet they engage in more disgraceful doings toward each other than any other set of intelligent men.

All the bitterness, all the bickering, all the strife and all the strained relations it has ever been my lot to observe among doctors, were the direct outgrowth of foolish sensitiveness, petty jealousy and petty spite, which are not in keeping with this broad and tolerant age. Therefore, let me appeal to you to rise above the level of mediocrity of conduct and walk in the altitude of that plateau where intelligence and integrity, merit and manly character constitutes the dominant elements of a doctor's make-up, remembering all the while that the combined influence of your personality and your profession are more potent for the good of mankind than the greatest power ever wielded by prince or potentate

CONSULTATION AND COMMISSIONS.

I lament the tendency of some, in these modern medical times, to disregard the tra-

ditions of the profession and tend in their action toward a too commercial conduct.

The most degrading, despicable and damnable practice that ever pervaded the profession of medicine is the vicious custom of commissions. The family physician who would betray the trust and confidence of his patient; who would for a paltry profit hazard his patient's life by referring him to an incompetent surgeon or specialist, has no professional character and should lose professional caste. He is without character or conscience and is so steeped in self and sin that he would sell his birthright for a mess of pottage.

The physician in selecting counsel should be unbiased, except by the patient's choice, which should be accepted provided it brings into the case a man of character, competency and ethics. This society should be on record as condemning the giving or acceptance of commissions for referred cases.

THE MOTTO OF MEDICINE.

One of the greatest needs of our present day profession is a return to the sentiment of the old regime; to sway again the sceptre of that sublime influence that was a part of the old time physician; to forget self in the interest of science; to renew our faith in the practice for principle; to realize that the reward of worth is the patient's relief and not the material recompense; to realize that ours is a labor of love for and loyalty to the profession, and that we must by never ending work, be prepared to meet the great demands that are made upon every successful physician.

All great professional philanthropists have been intellectual giants, to become which they were indefatigable workers, they realized to the maximum the motto of medicine to be, "Labor and Learn" and that doctors to keep apace the progress of their profession, must profit by every fleeting hour.

To admonish the young of our profession who might otherwise idle away the noon-day of life, I beg to impart the wisdom of the poet:

"One sweetly solemn thought,
Comes to me by the way;
Although success crowned yesterday
I must improve to-day."

FELICITATIONS.

To those of you who have labored so unceasingly and unselfishly, who have labored so sincerely and so successfully for the improvement and the upbuilding of your chosen profession, there must come to you to-day

no small amount of satisfaction, because much has transpired during the past year to occasion great gratification on the part of the profession of Kentucky.

In our splendid official JOURNAL of to-day we realize the wisdom of our predecessors in establishing, that excellent means of communication between this organization and its several component societies and between the profession and the people.

We have seen this association add 288 new and active doctors to its membership and over twelve hundred dollars to its treasury. We have seen its beneficent influence expand until to-day it embraces the entire State from the Cumberland mountains to the Mississippi.

We note with pleasure, and no less with pride, the great good that has come not only to the profession of Kentucky, but of all the land in the decided victory over the insurance companies. That victory has been especially gratifying to this association because it had its inspiration in the zeal of one of its component societies, and its accomplishment in the daring demands and the endless energy of one of its members, Dr. J. N. McCormack, to whom the profession of this State wishes all honor and glory; and to whom the doctors of this union owe a debt of gratitude they can never repay. But alone and unaided he could not have accomplished this great work. It was by the strong arm of organization that he succeeded in routing the enemy.

ORGANIZATION.

Organization is an essential feature of modern medicine. It is the strongest and most potent factor for the success of our profession. Emerson says that a lack of it is one of the greatest evils besetting medical practice.

Ours is inherently and, in every sense, a progressive profession, and the greatest means of our progress are organization and the societies resulting therefrom. We can retrograde only in the absence of medical meetings or by the apathy of the individual.

A few years since it became apparent to the dominant medical men of Kentucky that apathy and indifference to the profession's welfare constituted a great hindrance to the growth and development of the profession and lessened its influence both locally and at large. They also became convinced that the only immediate remedy lay in reorganization, and out of their convictions and their efforts, evolved the present splendid society whose wholesome influence is felt not only by the

profession, but by the people of the State as well.

This is indeed an age of organization, in this age there are few men who, single-handed and unaided, can pursue with success the paths of progress. The evolutionary processes of civilization have created for every calling in life a feeling of mutual interest among its members and demanded a training and a strengthening of their power by organization. While this is true in a material sense of all callings, medicine with its organization and societies has a higher and a nobler purpose than merely augmenting its numerical strength. It raises the standard of its adherents; it makes better and nobler men of them; it broadens the man as well as the mind, leading him out of that narrow channel that isolation begets both of person and practice, thereby expanding the sphere of his influence and usefulness, and gives him greater power to reform that marvelous mission ordained for him by the Divine Physician when He labored among the many that needed succor as well as salvation.

Many men deny the need of organization in medicine, to such I can only say they lack the wisdom that comes of thoughtful consideration of the subject.

The profession of which we are a part, is by its peculiar environments, a great bearer of burdens, and in every age must shoulder its allotment; therefore, there is a heritage that we of to-day could not if we would, disclaim. It is incumbent upon the present generation of doctors to congregate periodically in conventions, that we may receive from each other the fruits of individual labor and go thence to make manifest to the world the merits of modern medicine; otherwise those valiant saints of science who toiled under such adverse circumstances in the by-gone ages, to establish the principles of our profession, will have lived in vain and the profession will dwarf and drop to a plane below the level of a science or an art and mankind will lose the marvelous protection it affords.

Our race is spending annually millions upon millions of dollars in government organizations to protect property and preserve and perpetuate national prestige while we, until recently, spent but little; and yet we find in the willing and unrewarded workings of our profession, a silent and sacred preservation of human lives more valuable far than the accumulated assets of the mightiest nation. If it behooves a nation for material consideration, to thus gigantically prepare and protect, should we not give freely of our time

and talent to perfect and perpetuate an organization designed to destroy disease, to alleviate the ills of suffering men and to do the ever increasing duties that advancing civilization places upon it?

That the purpose of the State Association is worthy of support by the people as well as the profession is shown by its primary object which is to elevate the profession as a whole and enhance the ability of the individual member.

Previous State organizations may have been and possibly were, run for a selfish motive, in the interest of some individual or set of individuals, made possible by election of officers from the floor; but the present plan of representation by delegates gives every county its say in the election. Its reorganization was not intended for personal preference nor has it so served the interests of any one. It was aimed and inaugurated to teach, improve, elevate and broaden the minds of the members, and it will, therefore, not depend upon professional sentiment or individual support to arouse enthusiasm or induce a general participation in its proceedings. It has been, is now and always will be an important factor in the progress of the profession, and the accomplishment of its purpose will confer material and everlasting benefit upon the people, through an improved and efficient membership.

It is an organization of character and conservatism. Radical and destructive movements have, at times, gained a foothold in other bodies of men; but the Kentucky State Medical Association still remains as a monument to the professional prestige of an age long past and a beacon light to lead the intelligent and active profession of to-day.

Measured by its influence and growth of the past year, we are justified in saying that it has been eminently successful, and as we are now at the close of the present year with the rainbow of promise shining resplendently in the medical sky, I feel assured that with the coming of next year, we can confidently expect even a greater development. It was never stronger than to-day and never wielded a more peaceful, progressive or potential influence over and for the profession, and never viewed the future with a more confident hope.

While I do not desire, in the least, to make any vain or illusive predictions, I do wish to express my utmost faith in the integrity and intelligence of this society's membership and my further belief that it lies appropriately within the province and the power of this

society to create for itself the distinction of being the best State society in the Union.

You can vouchsafe that realization by being present at every meeting, lending your professional zeal as an inspiration to others and, paraphrasing the patriotic words of Lord Nelson, announce that the Kentucky State Medical Association expects every doctor to do his duty. Then let us put our shoulders to the wheel, make a steady pull, a long pull and a pull altogether, giving for our command the words of Macbeth "Lay on, McDuff, and dam'd be him that first cries, Hold, enough".

ORATION IN MEDICINE.—PREVENTIVE MEDICINE AND SANITATION.*

BY CHARLES H. VAUGHT, RICHMOND.

To have been made "Orator" for any State Medical Association would have indeed been an honor to any man, but to have this position from the Kentucky State Association is an honor of which I am justly proud and one to me that words are meaningless in expression of my thanks to you, and one to which any member of this great profession might aspire.

Born in this great Commonwealth, reared within its confines, inspired with a passionate pride in its prosperity and progress, I feel that I may be pardoned for my devotion to its traditions and history, its citizenship and its doctors. As time has passed and in my daily intercourse with my fellow men, I have heard of the glories of the far East, of the wealth and its easy possession in the Great West, of the business push and prosperity of the North, of the opportunities further South to acquire fame and fortune; that this great State was peacefully slumbering at the very door of civilization and had made no response to the clarion call of progress. To all these I have said, I would rather live in Kentucky and belong to the rank and file of the medical profession, "Than to wear the crown of imperial power and live in a palace of gold anywhere else."

The sternness of perfection we do not claim or desire, but some of us, whether in the medical, legal or other professions, believe that the hills and mountains of this old State are a little greener, that its valleys are a little more fertile, that its bluegrass is a little bluer, that its ozone is a little purer, that its horses are a little fleet, and that its daughters

* Read before the Kentucky State Medical Association, Louisville, October 16, 1907.

are a little fairer, and that its sons are a little nearer the true standard of the Anglo-Saxon than those produced by any other State.

Whenever there has been needed a great man in any calling in all this world, Kentucky came to the front and said, "We have the man," and she did. Conspicuous among her great men have been her great doctors. From whence came the genius of the great McDowell, when in the face of a seething mob, with no authority to cite and no experience to illumine, he conceived and executed successfully that great operation that has been the means of relieving the unnecessary suffering of millions of women throughout this land. I have thought that it was not a desire of his to make him great, he was already great, born that way. He did not do it to advertise himself, for at this time the noble profession that claimed his attention had not felt the baneful influence, nor did it know the humiliating and degrading influences of commercialism, that we see all around us to-day. Indeed advertising is so skillfully done, that it almost becomes ethical, or at least the profession seems to have accepted it as a part of its policy. He did not do it to advertise the village in which he made his home; he did not do it because he happened to be born in Virginia, but I believe he did it because in early life he adopted Kentucky as his future home, and became one of us. He was then a Kentuckian, a leader of men, and a leader in his profession.

It is also a fact that it was a Kentuckian that did the first hip-joint operation, Brea-shear of Bardstown. It was a provincial Kentucky Doctor that became one of the greatest jurists the world ever saw, Dr. Samuel F. Miller of Madison County, the county of my adoption, the place I make my home. It was Dr. John D. Jackson that gave us that splendid series of lectures on the black arts in medicine, that should and does entitle him to rank with the great Kentucky doctors. Dr. Flexner, of this beautiful city, who at this time is at the head of the Carnegie Institute, gave us the serum that we believe will relieve one of the most dangerous and malignant troubles with which the physician has to deal, "cerebro-spinal meningitis." There are many others fully as able and as worthy as any of these, who are members of this great association, surrounded by them and other friends, and those that I love, I expect to spend the remaining days of my life in the rank and file of this noble profession in this, my native State.

I am glad that providence has permitted so many of us to live for this golden age in medicine, when it seems that this great profession is rapidly coming into possession of its own; a time when a noble and beneficent profession, standing for something has been at last able to command the attention and the respect of all people of every clime and country. It is the one profession that has always gone forward, never a backward step has it taken. If progress has been slow, it was because of the ignorance and superstition concerning things medical, its aims and objects. Notwithstanding the inexcusable ignorance and stupidity, the utter lack of sympathy from the public in whose interest this profession has at all times unselfishly worked, we see it to-day take its place along side the greatest profession the world ever knew. To this and more it is entitled, yet every forward step has been questioned, every advance has had to combat ignorance and prejudice, but this great profession, united and confident, by devotion to duty and scientific attainment has conquered most of the preventable diseases and will go on undaunted by fear, unawed by criticism, until its beneficent and altruistic influence has silenced the putrid lips of the ignorant and vicious, and will, I believe, conquer the remaining few. The juggernaut car of preventive medicine will sweep aside the individual who will obstruct its onward march regardless who he is or for what he stands. The value of life is too great to be lost in this manner. While we have not accomplished all that we desire or expect, our knowledge regarding the nature of contagious diseases, for instance, has advanced by leaps and bounds. This has led to a greater precision in the measures to combat it. While in earlier times we were groping in the dark guessing at conclusions, we now work on more definite lines. Improved method of compiling and studying vital statistics, with a better knowledge of disease, have been the instruments responsible for the advancement of sanitary science as well as sanitary legislation.

We have seen this, the noblest profession that ever claimed the attention of man, emerge from uncertainty to certainty, from an obscure position to a position of the proudest and highest, from empiricism to science, and from science in the treatment of disease to that still higher science, the prevention of disease.

If we are to keep up this great work, this profession must be united and organized and stand for those higher and nobler principles,

which have at all times actuated the true man of medicine. She will need the best men she has as teachers of the public. She will need able men in the legislature and in the senate, in the executive and judicial departments of our government. We have able men all over this great country who will respond to this call. If it means financial sacrifice, they will make it. If it means personal sacrifice to them, it will be no untried experiment, for they have been making both all these years. Let the call be made and the doctor will respond. With enough such representation as this, our health boards and sanitarians and those interested in public health will not be compelled to suffer the indignities to which they are often subjected in asking appropriations from executives, judges, fiscal courts, etc. Many of them act as though they were conferring a favor that would personally benefit us, rather than for that higher purpose, the protection of the public health. We at an earlier time than this attributed these conditions to prejudice. We can no longer do that, since we know it is alone due to bad education and stupid ignorance. As Dr. Parks has said that it had been proven over and over again, that nothing is so costly as disease, and that nothing is so remunerative as the outlay that augments health and in doing so augments the amount and value of the work done.

If the ignorance concerning this profession were confined to those who were the uneducated members of society, if it were confined to those who were ignorant concerning other matters as well, the outlook would indeed be bright for a still more rapid advance in preventive medicine and sanitation. It required nearly six years for the greatest deliberative body of the world to pass the most beneficent and far reaching bill that was ever enacted by the American Congress, "The Food and Drug Act of 1906." This bill met the most vigorous resistance in both houses. A great senator from the state of Ohio opposed it, and conspicuous in his opposition was the Speaker of the National House, who, if he has not been misquoted, said that this bill was the "foolishness of fanatics." Thus it is that we have ever had to combat ignorance and prejudice in high and low places as well. And yet there can be no excuse for so great statesmen as these, occupying as they do prominent places in the estimation of all our people, to stigmatize a bill of so much importance to all classes, and especially to those unfortunate members of society, the poor and uneducated class, whom we have with us always; those that get their

inspiration from the family almanac, or the once a week county paper; both of which are usually filled with the advertisements of those vultures, whose prey is human hope and whose success depends on human credulity.

It enables this and all other classes to know what they are giving or what they take. If they have been giving these compounds to the innocent child or the trusting wife, many of them containing morphine, cocaine, acetanilid and other narcotic drugs. But when such drugs are contained now the label must so state. It will prevent this and other classes from self medication. This bill has already and will continue to accomplish more for the public, and especially the sick, than any bill ever before enacted in my humble opinion. And yet as I have stated, it required nearly six years for the American Congress to enact this law. But its friends knew its virtues, knew its benefits to mankind, aided by this great profession, worked on by day and by night for all these years, and were finally rewarded by the passage of this bill, the greatest achievement of our times.

It has been truly said that nothing is worth having unless it is worth fighting for. The life of those engaged in the practice of medicine certainly prove the correctness of the assumption. Our life is one of warfare, having as relentless foes disease and ignorance. One equally as obstinate as the other. When one is conquered, the other is there with which we must deal. There is, there can be no Utopian Paradise for the man of medicine. For

"We are the voices of the wandering wind,
Which mourn for rest, and rest can never find.

Lo as the wind is, so is mortal life,
A mourn, a sigh, a sob, a storm, a strife."

With faces toward the future, with the fresh morning of enthusiasm, to which the ennobling influences of this great profession has awakened us with ideas higher than the vulgar mind can attain, we will go forward with the legend emblazoned on our banner, "Our aim is to master disease and educate the public."

It is unnecessary that I tell you what has been accomplished by sanitation and preventive medicine, for many of you know it better than I. Yet the record is one of which we are justly proud. As we are well aware that "to filth in the broad sense of the term must be attributed the pestilence and death in the dark ages. When whole armies were destroyed, when cities were depopulated, when

gaols were death-holes, when the general death rate exceeded eighty per one thousand." Health and sanitary practice has been responsible for reducing the annual death rate to about sixteen per one thousand. "Preventive medicine and sanitation" is the practice of to-day; it will be the practice of the future. Let us take a brief retrospect and see some of the things which it has accomplished. *Smallpox*, that loathsome disease, which we all at one time dreaded, which we yet abhor, has been shorn of all its terrors since the introduction of vaccination. And those who select to avail themselves of that protective measure can afford to view exposure to infection without alarm from evil consequences.

Diphtheria, a disease regarding whose etiology as well as its prevention was long a subject of discussion and earnest inquiry, until Klebs, in 1883, discovered the diphtheria bacillus, which explained its etiology and the advent of the antidiphtheric serum simplified very much its treatment. And in the last decade, this serum has been responsible for robbing it of most of its terrors. Many firms now produce a diphtheria antitoxin that is both safe and reliable. And if health boards will attend to the matter of having given immunizing injections when the disease exists in any community or school, and see that this was properly done, then diphtheria like variola would be eliminated from the perils of childhood.

Hydrophobia, that fatal affection in man of which little is known save that it is a microbic disease, the treatment of which at all times had ended in almost total failure, the profession being impotent in staying its progress until the great Pasteur discovered a means of prevention of its development by injecting an attenuated cultivation of this virus, which when innoculated into man that has been bitten by a rabid dog has the effect of greatly diminishing the risk of death, or if given early enough positively prevents its occurrence. By killing off all worthless curs and muzzling the more noble survivors, this disease would be forever stamped out.

Tuberculosis, that arch enemy of mankind, responsible for more deaths than any other single disease, a disease the ravages of which have been the cause of one-seventh of all deaths prior to the coming of Koch with his discovery of the tubercular bacilli in 1881. Up to this time we were as helpless as the storm-swept vessel, without guide or compass, striving with cod liver oil and creosote to accomplish a cure or stay the progress of this disease until a better day should

come. Thank God, the halcyon days seem at last to be near at hand. This chronic, infectious, communicable disease is better understood than it ever was before. Sanatoria are springing up like magic all over this land, and the best statistics in sanatoria treatment give out as a fact, that more than sixty-six per cent. of incipient cases remain well after a lapse of a half-dozen years. Isolation and disinfection are the watchwords. It is here that sanitation and preventive medicine have won their greatest laurels. It is here they will achieve their greatest glory. Fresh air, sunlight, outdoor living have accomplished great things for those who suffer from this disease. And at the time when the whole world was so deeply interested in any means that even promised a better condition for these unfortunate sufferers, England came forward and said to the world, we present to you one of our most distinguished citizens, one of our most accomplished scholars, Professor Wright. 'Tis he who discovered the opsonic therapy, which gives every promise that a specific as certain in its results has been discovered by this brilliant and technical humanitarian for the cure and prevention of tuberculosis as has been those of Jenner, Berhing and Pasteur. Many successful cases, even at this early time, have been recorded, representing most ever character of localized tuberculosis. But the systemic tuberculosis is the one whose mastery is so much desired by the great profession that we have the honor to represent. And who of us knows but that this Opsonin of Wright is a specific for this form also. "One of the greatest difficulties experienced in dealing with tubercular subjects is the fact that he is constantly inoculating himself with the product of his own disease, with his own tuberculin. Since the physician cannot regulate the amount of bacterial substance absorbed from his patients own focus of infection, he may be adding to the danger by inoculating the tuberculin." When we remember, however, that all we wish to accomplish cannot be done in a day, we must content ourselves to await the perfection of the technique of the Opsonin Treatment. Every country and every people are intensely interested in this great scientist and are sending their ablest men to be near this great genius that they may learn the application of his theory. "The general hospital of Toronto has deemed it advisable even at this early time to establish a department of Opsonin Inoculation, and has secured as director, Dr. Ross, one of Prof. Wright's most brilliant students. The attitude of the educated profession all

over the world, toward this Opsonin Therapy, is one of hope and waiting, suspended judgment and of extreme respect." We have every confidence in the daring of this great man, and expect to see in the not far distant future, complete mastery of the great white plague. This desired end to be attained by the Opsonin of Wright, sanitation and prevention. In the meantime, the sanitarian will not have to plead in vain for pure air and sunshine, for pure food and clean water, for we well know what these have accomplished and they can be had without effort or great expense. Perhaps it would be safe to say now, that fully 50 per cent. of these cases are curable. Let us anticipate the time when the other 50 per cent. will yield to the perfected Opsonin of Wright and other means at our command.

Wound infection. The discovery of the microbic cause of inflammation has been the inspiration of the man of preventive medicine as well as the sanitarian. It has made possible the intelligent and effective application of both. We are now ready to bring about rapid healing in all sutured operation wounds, however large. The result has been that surgery has made rapid and extraordinary strides, being assured of rigid antiseptis, we cut down on any part of the body with impunity. Not only with therapeutic, but with diagnostic intent. It is also a fact that primary union may and does occur in every wound that has been placed under favorable mechanical conditions and excluded from micro organisms and their chemical product by thorough asepsis. Laudable pus, if indeed such a thing ever existed, no longer delights us. No longer do we do primary amputation to save life. Hospital gangrene has been relegated to the limbo of the forgotten past. Puerperal fever and sepsis no longer hang like a pall over the lying-in room, since we have been taught the importance of asepsis and have been impressed with the fact that scrupulous cleanliness is more important here than in any other department of surgery or medicine. More care should be exercised in these cases than is usual in abdominal sections, for we should feel that if by carelessness in detail or technique, we at this time should be responsible for a single case of puerperal fever, we would be little less than criminal. These patients are safe in the hands of any competent physician.

Yellow fever, that horrible disease, which for so many years has been the blight of all our Southern territory, with its black vomit and its delirium, its coma and convulsions, will, soon let us hope, be wiped completely

off the face of the earth by the application of the mosquito doctrine. We have seen the Republic of Mexico and the Canal Zone, both of which nearly reached the desired desideratum, the final extinction of yellow fever. The Republic of Cuba, by the application of the same doctrine continues to maintain its territory free from yellow fever. And as soon as New Orleans adopted this doctrine, this disease, with its devastating and blighting influence was seen no more. Being assured that we have an efficient as well as positive defense against the propagation of this disease, we feel safe in the prophecy that perhaps another decade will see yellow fever banished from the earth, another laurel, another triumph of preventive medicine.

Typhoid fever, another acute, infectious, preventable disease, the source of this infection being the excreta of some typhoid patient, makes it apparent at once that with proper sanitary precaution, this disease should have also been banished long ago. This precaution can only be made effective by a campaign of education among the masses, the object being to teach them that pure water, pure milk, and pure food are no more expensive than polluted water and unclean food; teach them the importance of excluding flies, which are known carriers of this disease. And when the time comes, as it surely will come, when municipalities are held responsible by law for furnishing a polluted water supply to its citizens, and are liable for damages therefor, it will awaken our slumbering optimism to the realization of the fact that life is worth saving, too valuable indeed to be lost by criminal neglect. Statistics abound, showing the remarkable decrease in typhoid fever following the improvement of the water supply in communities and cities. In some instances this reduction in morbidity reaches as high as 90%. With proper respect for sanitation, with publicity and education as to the means of prevention, we expect to see this disease wiped off the face of the earth.

Malarial Fever. It has been proven many times that this infectious disease is preventable; that its etiology is due to the bite of a mosquito; that the anopheles laden with the malaria plasmodia is alone responsible by its bite for the spread of this disease. In this important field for preventive medicine, there are many able, ready, active workers already enlisted, and they give promise that this disease will also soon be known only in medical history.

So much, then, briefly for some of the achievements of preventive medicine and

sanitation. Who have made these triumphs possible? The microscopist and the bacteriologist have played their part. Many of them have arrived at greatly exaggerated and erroneous conclusions, no doubt. But the more competent are the most conservative, and they are very slow to give out information that has not been conclusively proven. These have been responsible for much of the advancement in preventive medicine and sanitation. The application of his finding, however, must at last rest with the man at the bedside, who is dealing with the living, and without whom chemistry, microscopy, bacteriology, culture tubes and the rest would amount to little. Physical therapeutics has been and is playing her part in the gigantic whole. Pure air and sunshine have never been so valuable as now. The X-rays with its mysterious power has but begun its disease-conquering march. The chemical laboratory has contributed much, the clinical laboratory more, but the observing physician at the bedside relies on his experience first, which he finds many times his best instrument of precision. There should, however, be no conflict here, the one is dependent upon the other and there is glory enough for all. "Triumph has followed triumph in rapid succession." This will continue until we see our fondest hopes realized, the extinction of preventable disease. The men who have made these advancements possible are many. If we go to "fame's eternal camping ground" and call the roll, it would be a long and illustrious list of names that we would hear. There would be heard the names, perhaps, of Lester and Jenner, McDowell and Pasteur, Donovan and Wright, Klebs and Welch, and hundreds of others. But we would not hear the names of those great men, those heroes, and there are thousands of them, who have borne the heat and burden of the day without display, free from the spectacular, these unselfish men, the family doctors, whose devotion to duty, lofty ideals and personal sacrifices, have claimed for them at all times the reverence of mankind. We honor them because they honor us, we honor them because they ennoble our race. Their lives were pure, their aims were high, their learning varied and their achievements great. "These brave and tender men in every storm of life were oak

and rock, but in the sunshine they were love and flower," filling the world with mercy, hope and joy. These men whose very nature had been softened by the anguish of human experience, this doctor at the bedside, let his name be written high in the hall of fame; let it be written with seers and sages, with philosophers and statesmen. It will not be written there because the world knew of his great humanity and devotion to duty, but it can and will be written because he of all men can say with Abou Ben Adhem, "Write it as one who loved his fellow men and behold his name will outshine all the rest." In all ages, people have honored those that dishonored them; they love to worship their destroyers. Yet these brave honest men, possessing that courage, that dares and if need be suffers, asking nor desiring applause without a thought of the limelight, these great men who never abandoned the sublime standard of truth and honor, who went about on missions of mercy, these will need no marble shaft, for upon the silent shore of memory, they will be forever honored—forever mourned.

"So long as brain and heart have faculty by
nature to subsist,
Till each to razed oblivion yields his part,
Of them their record can never be missed."

And finally when the curtain is rung down on the last scene, when we stand before the Great Physician and Judge, who rules this universe and the destinies of men as well, sits in judgment where men are passed upon for worth and that alone, then these names will be heard,

"For they stood as soldiers until the last
right end,
As perfect patriots and as noble friends."

"In the night time and in the day, he would
rally brave and well,
Though the summer lark was piping, or the
frozen lances fell,
Knowing if he won the battle, they would
praise their Makers' name.
Knowing if he lost the battle, then the doctor
was to blame,
'Twas the brave and virtuous doctor,
'Twas the good old faulty doctor,
'Twas the faithful country doctor,
Fighting stoutly all the same."

STALE POINTS FOR THE LIFE INSURANCE EXAMINERS.*

By J. G. CECIL.

MEDICAL EXAMINER OF INTER-SOUTHERN LIFE INSURANCE COMPANY.

The responsibility of the life insurance examiner is no mean one. In conferring the appointment the company compliments his ability as a doctor, and his probity as a man, and in accepting the appointment his attitude should thereafter be one of strict allegiance to his company. On the other hand it is no trivial act to recommend the rejection of a risk, it may mean weal or woe to the dependent, however, when the risk is debatable the company should have the benefit of the doubt.

It is well for the examiner to remember that there is a reversal of position in a man as a patient and the same man as an applicant for insurance. As a patient, he is disposed to magnify his ills and weaknesses; as an applicant for insurance, he is disposed to belittle or conceal these same ills. Broadly speaking, "nine out of ten patients are diseased and nine out of ten applicants are healthy." The general attitude of the medical examiner must of necessity be one of mental alertness and quickness to detect imposition or imposture, but never should he betray suspicion by word or look, or by brusque mode of putting questions. He must in short, cultivate the manner and methods of the diplomat and achieve his ends by a never-failing courtesy combined with firmness and decision. It is one of the many situations to which is applicable the old saying, "the iron hand in the velvet glove." The magnitude of the business of life insurance staggers our comprehension and taxes our imagination. The human mind can with difficulty grasp the vast sums that represent the insurance in force. It affects the rich and the poor, its beneficiaries are those we love the best. Only pity is felt for the dependents of those unfortunate enough to die uninsured. Practically every medical man is interested in insurance either as an examiner or as a partaker of its benefits. The purpose of this paper, however, is to call attention to some points in the business of making examinations for the purpose of life insurance. "Doctors disagree," that is a saying both trite and true, of course, lawyers, politicians, ministers and merchants never do. Insurance companies, however, have

recently discovered one subject upon which there is a striking and singular unanimity of opinion among doctors. Need it be mentioned—a uniform fee of \$5.00 for examinations. The echo and reverberation of this is heard from city and town, from cross-roads and hamlet, from practically every doctor-shop in this broad land and methinks just a bit louder from the dark and bloody ground than any other state. Be it said to the everlasting credit of the profession that there is at least one subject upon which there is no dissenting voice. Should there be one here who would make an examination for \$3.00; well—"tell it not Gath—whisper it not in Eschylon." But enough of this sordid subject of money, enough of this "*quid pro-quo*." Let's turn to where science beckons with beaming smiles and open hand. It is a far cry from yellow backs to yellow jaundice, or from bright dollars to Bright's disease, but this last should engage our attention for a space. All insurance companies, even those of modest pretensions, in these latter days require urinalysis before acceptance of the risk. Statistics that have been collected with great care, at great expense, extending over years of time and embracing thousands of risks, reveal some curious, surprising and unexpected results, but I forbear to quote statistics. It is generally conceded that urinalysis in many cases is a farce—sometimes through inability of the examiner, sometimes (let us hope rarely) through venality, the analysis may as well have been omitted.

In certain forms of nephritis the gross symptoms are so much in evidence that the urinalysis is only confirmatory. In other forms of the same disease the kidney symptoms are so irregular and uncertain that the analysis must be made with the utmost finesse as to detail and often repeated several times before the real condition can be established, thus it may be readily seen that there is practically no danger from some varieties, there is very great danger from others. It is the slow, insidious interstitial nephritis that is the foe to the insurance company. No conscientious examiner cares to have it said of him that he recommended a risk suffering from Bright's disease, and yet it is done every day and that too by men considered competent. This disease chooses with remarkable frequency for its victims the very man or class of men who are most easily written for insurance because they constitute a class in the community that desire protection for their families and who can afford to carry it—often in large amounts. This class

* Read before the Jefferson County Medical Society, September, 1907.

is made up of the men of large responsibilities, the heads of the profession, the money makers, the men who can afford to and who do live well. The men who were originally blessed with good health who become so engrossed with the cares and worries of business that they neglect and forget their health, who are often said to have died in the prime of life and at the height of their usefulness. Now the examiner who depends on the simple analysis usually required for the diagnosis of this form of Bright's disease will often be too astray and will recommend for acceptance a risk that will not live out his expectancy. It is not expected or required of the examiner that he should make repeated analyses for the small fee that is paid. But there is a surer way to avoid the responsibility of advising such a risk. Look out for the symptom-complex that proclaims this condition often before the kidney symptoms attract attention. Observe the hard pulse, usually quick, the slight enlargement of the left ventricle, the accentuated snappy second cardiac sound, the quickened respiratory rate, the slight dry cough, the rather persistent head-ache, the slight but repeated attacks of indigestion. Perhaps the early appearance of the arcus senilis tendency to insomnia, one easily tired, especially after climbing a stairway, inability to concentrate the mind. Now many a man may have several of this group of symptoms and yet will tell the examiner that he is in perfect health, and a hasty or careless urinalysis will fail to catch the low specific gravity, the trace of albumin or the elusive tube-cast that may or may not be present. It is more than probable that within a very short time a new nomenclature of diseases will classify this as a disease of the arterial system rather than a kidney affection. The much discussed question of albuminuria vexes the examiner quite as much if not more than it does the practitioner. There are several good tests for albumin that may be used by the examiner. It goes without the saying that whatever test is used, it should be applied with great care. The presence of albumin in the urine is always significant, more so in the acceptance of a risk than in ordinary practice. Albumin in small per cent. may or may not indicate organic disease of the kidney. When persistent even in small quantity it impairs the risk and is generally a bar to acceptance. The same may be said of tube-casts. These, however, are not sought for except in the consideration of large risks. There may be, according to Tyson, Bright's disease without either albumin or tube-casts

in the urine, and conversely there may be both albumin and tube-casts without Bright's disease. But when either or both, and especially when both are persistently present, even in small per cent. of albumin or tube-casts few in number, the presence of organic kidney disease can scarcely be questioned.

The greatest foe of the insurance companies as it is of the human race, is tubercular disease. The effort to avoid this has inspired most of the investigation under the heading of family history. In the light of modern knowledge, however, the question of heredity is subsidiary to that of environment. This has resulted in the insertion in the application blank of the question, "Do you now, or have you, lived in the same house with one who has consumption," a more important question than whether parents or grand-parents suffered from it. As our knowledge of the common mode of propagation of this disease becomes more general the significance and importance of this question is realized. The one point in the examination of any patient whether giving significant family history or not is to be on the lookout for tubercular disease in its incipency. It is the early diagnosis that counts in life insurance quite as much as it does in the subsequent management of the case, for it must be remembered that when a man is once accepted the company must be good for it. It cannot be avoided and the only way the company can escape the loss is by lapse which will hardly occur when the insured or his friends realize his condition. The early symptoms of tuberculosis cannot be too well understood by the examiner. He should not fail to note shape of the chest, the history of frequently recurring bronchial catarrh, the environment and occupation of the applicant, the loss of appetite and flesh, the slight cough, the shortness of breath, the increased pulse and respiration rate, the slight flatness on percussion over the affected area, the harsh respiratory sound, the prolonged respiration, at times the cog-wheel respiration, the bright eye, the red spot on the cheek, inveterate dyspepsia, or possibly a slight persistent hoarseness. These and many others betoken the incipency of the dread disease which is the *bete-noir* of the insurance company. The conscientious and painstaking examiner will not fail to familiarize himself with these incipient forewarnings and protect his company from such risks.

Diseases of the heart and arterial system always impairs the risk, even the so called functional diseases of the heart should not be passed over too lightly. Not a few of the

deaths from angina pectoris and apoplexy have never shown any condition recognizable to ordinary physical signs, while very many such deaths have been preceded by symptoms of indigestion, increased arterial tension and others not usually discovered by the casual or careless examiner. Notwithstanding the importance attached to examination of the heart and blood vessels by all companies, surprising as it may appear "the statistics of one of the best companies noted for its careful selection as judged by modern insurance standards show a 21 per cent. of the total mortality chargeable to disease of the circulatory system and blood vessels, and, further, that an extraordinary number of these deaths occurred in middle-age policy-holders. Chas. L. Greene in the recent edition of his "Examinations of life insurance" adduces interesting clinical evidence to show the incompleteness and inadequacy of much of medical selection as recommended by medical examiners. Eleven cases of organic heart disease easily recognizable by physical signs came under his observation that had been examined, recommended and accepted for insurance within periods varying from six weeks to two years and none of whom had been regarded as sub-standards. Dr. Greene ascribes this condition of affairs as partly due to the examiner and partly to the company. He says the companies are at fault in two ways. 1, They (the companies) do not as a rule impress the physicians employed by them with the idea that anything more than a formal examination is demanded. Many physicians get the impression that a large part of the instructions issued by the different insurance companies has been little more than a sham. 2, The lack of definiteness in the companies' requirements. The average examination blank contains an appalling number of questions, most of which are no doubt necessary, yet oddly enough the greatest amount of special inquiry is devoted to some of the least important particulars, while the questions affecting the heart, lungs and blood vessels are often very general. Again how few companies in their blanks make any specific inquiry as to the condition of the blood vessels. This is all the more remarkable in the flood of light thrown by modern research upon the sclerosed condition of the development of other diseases. Were the attention of examiners devoted more specifically to this condition, the death rate among the insured from cardiac disease, interstitial nephritis and apoplexy would be perceptibly reduced.

Your patience will be taxed for the brief consideration of only one other question, namely, that of gout and rheumatism. It is my firm conviction that in hereditary influence these diseases maintain nearly if not quite as an important relation to the selection of insurance risks as do the tubercular diseases.

That rheumatism is markedly hereditary is conceded. It is intimately associated with valvular and other forms of heart disease. In the family history undoubtedly a very respectable proportion of the deaths given as heart disease were distinctly rheumatic and while cardiac diseases may not be regarded as distinctly hereditary the primary affection resulting in their development exhibits strong hereditary tendencies and should be weighed with care in the recommendation of the risk.

The relation that gout sustains in the production of Bright's disease, arterio-sclerosis, apoplexy and certain forms of diabetes classifies it as one of the most serious hereditary diseases. In some instances, at least, as Dr. Vivian Poore has remarked, "the inheritance of gout has been the inheritance of a good income and a fine wine cellar." Two factors not especially attractive to a company wishing to do a safe business. Both gouty and rheumatic history running through several generations present a typical example of increased hazard. The further back it goes, the worse it gets. Statistics will show that in from 50 to 60 per cent. of all cases of gout the disease existed in the parents or grandparents. That males are more subject to the disease than females, and transmission is more marked on the male side. The collective investigation based on the records of 34 companies and limited to 30 insurance years has shown that the mortality in those having record of past attacks of gout to be slightly excessive in the first five years of insurance and afterward nearly double the expected loss. The same statistics do not show up so bad for rheumatism, but it is of far greater importance especially to American companies that the utmost care should be exercised in the selection of rheumatic risks.

These are only a few points, most of which are stale, that the attention of medical examiners for life insurance is called.

THE PREGNANT WOMAN.*

By B. M. TAYLOR, GREENSBURG.

When the pregnant woman informs her physician of her condition his responsibility begins and does not end until the woman has completely recovered from the puerperal state. By far too many physicians fail to appreciate this sacred trust and grave responsibility imposed upon them by the women who are dependent upon them for instructions in the physiology and hygiene of pregnancy and how to avoid the many dangers and accidents incident to pregnancy. The duration of pregnancy is, as you know, nine months and during this time the woman is not only exposed to the various diseases and accidents in the community, but to the many to which the pregnant state predisposes. For this reason alone we should throw around the woman every protection and to be at all times mindful of her condition and see that her pregnancy is as near normal as possible.

The woman in the hands of a careful and painstaking physician is very fortunate in her unfortunate condition, but the woman who is in the hands of the physician who takes no thought of to-morrow and the many dangers possible, has just cause to be alarmed. The latter is surely a case of the blind leading the blind. The only guidance in this case is mere luck. As a matter of course the woman is entirely ignorant of her condition and the only things that she does know are that she is pregnant and that women usually go nine months and at labor there are a baby and an afterbirth born. This knowledge is usually acquired from the neighbor women.

Let us for a moment examine ourselves and see how helpless and, I am sorry to say, how unfortunate are the women who ask us to guide them through these long months of anxiety, danger and suffering. How many of us are worthy the sacred name of Doctor? Why are we entitled to a larger fee in labor cases than we are in sitting for hours by the bedside of a patient waiting for morphine to ease a pleurisy? What makes the fee greater? Is it the reward for duty well and scientifically performed. Unless we give the woman the benefit of our knowledge for her guidance and the benefit of our skill and labor, we have no moral right to charge more for labor cases than for any other case in which we fail to do our full duty. The fee is more for services rendered and not to follow an existing custom made by our prede-

censors. If there is a time when we can feel ourselves every inch a doctor it is when we have safely guided our patient through pregnancy, labor and the puerperal state. By virtue of our profession we are educators of our patients. Preventive medicine is the scientific triumph of the physician and brings him near and dear to his people. Contrast the physician of to-day with the physician of a century ago. He groped blindly about in his attempts to cure while his meager knowledge of the real cause of disease made the field of preventive medicine a wilderness into which he could not enter. With our knowledge of the causes of diseases we should be well prepared to educate our pregnant women and secure their hearty co-operation in the management of their cases. If we fail to give these women the benefit of this knowledge, how much better off are they than their more unfortunate sisters who were pregnant a century ago when their physician had no responsibility except to wait upon them at confinement. In those good old days the doctor had to secure his medical knowledge by experience, aided by one or more small text books. To-day we begin practice with a scientific knowledge and an unlimited supply of up-to-date text books. Medicine is a progressive science. How many of us have progressed with it especially along the line of duty to the pregnant woman?

A century ago the streptococcus was unknown save to itself. It was introduced into the vagina under the finger nail of even the King's physician. This unknown, but mighty enemy slew thousands of women and found its greatest friend and ally in the physician who sat by the bedside of his patient sympathizing with her as nature took its course. An accessory to the crime, yet a sympathizing friend. Why was this condition permitted to exist? Because of the absence of the knowledge of asepsis which was to come a half century later.

Was a physician a century ago responsible for his cases of sepsis? No. Because he did not know. Are we responsible to-day for the convulsions due to an embarrassed kidney? Are we responsible for the loss of those teeth and the bringing forth of a delicate child, the result of a neglected and ruined stomach? Are we responsible for that case of sepsis due to a constantly loaded rectum? Are we responsible for that cracked nipple and the resulting mammary abscess? Are we as physicians responsible for the health and safety of the mother and child? With the broad cloak of charity and a desire to shield ourselves as

* Read before the Kentucky State Medical Association, October 18, 1907.

physicians I say a thousand times yes, we are responsible. We are not only responsible to the father, mother and child; but we are responsible for those whose lives this woman touches socially. Women are the best mediums we have for spreading the gospel truths of hygiene, sanitation and the proper care of themselves during pregnancy. Owing to the modesty of the sex mothers as a rule refrain from educating their daughters upon this subject and it is only after they are pregnant that they begin to be pupils and their only teachers are the old women in the community whose sole knowledge is based upon the superstition of generations.

It is a difficult and tedious task to educate the public to a degree of efficiency that will aid us in our work. It is not the work of a year, but the slow results of the combined efforts of the profession for generations. We are to-day reaping the results of our forefathers' shortcomings. We must have a united profession before we can hope for a united people. Whenever an opportunity presents we should endeavor to impress upon our patients the importance of placing themselves under the care of their family physician as soon as they are satisfied that they are pregnant. In this way we can do much good in the matter of education and management.

In a large majority of cases the husband "speaks to the doctor" merely to notify him and practically engage him at that time so he will have no trouble in getting a doctor at the time his wife is to be confined. He attaches no further weight to it. He should engage his physician with the same degree of care and protection as the defendant engages his counsel to see that he has a fair and impartial trial. The pregnant woman is a defendant and on trial for her life and health. She is constantly violating the immutable laws of nature and as ignorance is no plea before the bar of justice in health she needs the advice of a thoughtful and painstaking counsel to inform her and aid her in the avoidance of such penalties. As no criminal is allowed to be presented before the courts without a lawyer, so should no woman be allowed to approach confinement without the weekly advice of her physician. The murderer may escape because of his position in life or his money or a mere technicality in the point of law; but there are no technicalities in nature, and there is no escape from the effects of an embarrassed kidney save in the proper treatment and relief through elimination. The plea of "not guilty" must be entered through the channels of preventive medicine.

When a woman becomes pregnant the management and prognosis in her case are based upon the same principles as any problem in social or financial economy is based. The principles of physical and political economy are the observance of the law of waste and repair. So the law that governs a man's body is purely a business proposition—the income equaling the expenses, that is, the repair equaling the waste, with a sufficient reserve for emergencies. The body is a business of departments with each working in perfect harmony and obtaining perfect results. The embarrassment of one effects the results of the whole, or the chain is no stronger than its weakest link, so the body is no stronger than its weakest organ. When the husband speaks to his physician to wait upon his wife the physician has the same duty to perform that the agent of a corporation has before the goods are shipped and that is to explain the liabilities and assets. The pregnant woman has many liabilities during the nine months she is to furnish nourishment for the growing foetus in utero. We would think it bad judgment for a man to assume an obligation involving the payment of money when his business already scarcely met his daily expenses. The extra obligation would soon force him into bankruptcy. We cannot expect for a woman whose tissue building bank account is constantly overdrawn to assume this extra responsibility and demands and bring forth a healthy offspring or even go through pregnancy safely without the constant supervision of her physician. Let us look at that poor widow in our own neighborhood and take a lesson. She speaks louder than all the modern text books on waste and repair. If her store account is unpaid and her children cold and hungry, does she pay her doctor's bill? Her earning capacity must be increased so that her pantry is filled and the children clothed and all the bills will be paid.

When the husband says his wife will expect you at a certain hour the first rainy night that comes what are the liabilities and assets in her case? How many children has she had and how far up the rectum has the perineum been torn? How much work has she to do in addition to making the baby's clothes? How many times during the day does she stoop down and pick up that fourteen months' old baby that she is waiting for the signs to get in his legs before she weans him? How old is she physically? How much attention does she pay to rectal hygiene? What is the condition of her mouth and teeth? How much of her time

does she suffer from indigestion, headaches, backaches, pains in the limbs and pelvic discomfort? In other words find out what physical condition she is in so you will know what to expect and not be caught napping, so to speak by some avoidable complication coming up in labor. "Forewarned is forearmed" is very true in the practice of obstetrics. Of course it is not necessary to ask all these questions in every case, because if the physician has been in the family for some time, he usually knows the physical condition of the mother.

The first trouble for which the physician is usually consulted is the troublesome morning sickness. The first thing, of course, is to endeavor to find the cause. The two most frequent causes are errors in diet coupled with an already diseased stomach, and uterine displacement. If the stomach is the cause, the diet must be regulated and easily digested and unirritating food should be given. The cause is often due to overstimulation of the stomach by overeating. The appetite is abnormal at this time and unless the patient eats such things as she needs and not always what she wants she will have trouble during the entire pregnancy. The overstimulation causes prolonged attempts at digestion which causes hyperchlorhydria and this condition alone is responsible for many ills during pregnancy. The acid is not only irritating to the stomach, but is absorbed and of course must be eliminated. The saliva becomes acid and the teeth begin to decay. This is why pregnant women have to exchange two or three teeth for each baby. This condition not only affects the mother, but the helpless babe in utero who will reap the reward of neglect and abuse in later years. The first child may escape with a light punishment, but the ones to follow will come in for its share. Faulty teeth mean faulty digestion and poor assimilation and going back to our business proposition it means faulty posterity. This is the age of tuberculosis and the best prophylaxis in my judgment is good teeth and their proper use. Who is the man who pays you his bills promptly? He is the man with a sound financial assimilation. Who is the woman who is able to pay the drafts promptly made upon her economy by that growing child in utero? She is the woman with a sound physical assimilation. Who is the child that grows straight legs, sleeps well at night, cuts its teeth promptly and develops into a strong adult? It is the child of a healthy mother who sends through her placenta good, rich blood and not a fault-

ty solution of snap beans, onions, cucumbers, cabbage in hydrochloric acid.

Look at the bow-legged child. What produced those graceful curves? Ignorance on the part of the mother, perhaps the result of our neglect of duty. It requires several gallons of hydrochloric acid to bend a child's legs. So the importance of proper digestion must be impressed upon the mother.

If the nausea is due to functional disturbance of the stomach, with no pathological conditions present, allow the patient to eat her breakfast before rising. Chocolate, beef tea, soft boiled eggs or one of the cereals with cream for breakfast and for the other meals an equally unirritating diet and the proper attention to elimination through skin, kidneys and bowel will soon give her relief. For the hyperchlorhydria I employ the following: Sodium chloridi 1 part, sodium bicarbonatis 2 parts, sodium sulphatis 4 parts. Teaspoonful in cup of hot water before meals. This usually corrects the trouble.

If the cause of the nausea is due to uterine displacement or some irritation about the uterus or appendages, this must, as a matter of course, receive the proper treatment for such cases. Such drugs as bismuth, oxalate of cerium, have very little or no effect and are usually a waste of time.

Next in importance to the stomach are the kidneys. If the stomach, skin, and bowels are kept in good condition, the kidneys do not suffer as much. An examination of the urine should be made at least once every two or three weeks if possible. The patient should be taught the importance of reporting any headaches, pains in limbs, pelvic discomfort, difficulty in breathing, swelling of the hands or ankles, puffiness of the eyelids on rising in the morning, dizziness, impairment of vision, leucorrhea, constipation or inability to sleep well. If the significance of these symptoms be explained to the woman or her husband, they will be ready to co-operate with the physician in his efforts to properly manage his case. In case the kidneys are not performing their function, diuretics should be given freely and these aided by saline cathartics. When a pregnant woman has albumin in her urine even in small quantities, she is not safe and it is an indication that should be most carefully watched. Its persistence is an indication of serious pathological condition of the kidney and may terminate the patient's life some time after pregnancy.

The diuretics should not be irritating to the kidneys. I prefer potassium acetate and small doses of *Tr. digitalis*. These combined

with salines and hot baths will act nicely. The patient should avoid exposure of the body in sudden changes of the weather. A sudden chilling of the body may be the straw that will break the camel's back. Before leaving this subject I want to again impress upon us the importance of carefully watching the urinary tract.

The nipples should receive careful attention for several months prior to labor. Most of us know how annoying to the woman and to us a fissure of the nipple is. It is a dangerous complication; for the fissure affords an excellent entrance to infectious bacteria and this causes abscesses in the breast which frequently destroys the gland and makes a favorable site for malignant trouble in after years. Not only do we have this danger; but the child for several days may be nursing milk from an infected breast and if this is not dangerous to the child, it is to say the least very unappetizing.

The nipples should be softened and at the same time hardened or rather accustomed to irritation by the daily application of vaseline for a month or two prior to labor. Though out of the scope of this paper, I will add that after labor the nipples should be thoroughly washed off after each nursing with a solution of boric acid, borax or bicarbonate of soda. Milk is usually left on the nipples after the child removes its mouth and in hot weather this becomes infected and furnishes a good culture medium and not only predisposes, but causes the fissured nipple.

The treatment of fissure is the same as any other open wound either infected or exposed. The nipple should be cleansed frequently with some antiseptic and the fissure protected with an antiseptic ointment.

The colon and rectum should be kept as clean as possible. The patient should not be allowed to be constipated and any catarrhal condition of the rectum or colon should receive prompt attention. When the husband engages you, do not let him leave you until you have thoroughly impressed upon him the importance of having the woman upon the first indication of labor to thoroughly irrigate the rectum and colon with warm water. There is nothing so unpleasant, inelegant and dangerous as to have the child's head unload a pile of fecal matter and soil the parts, to say nothing of the physician's hand that butts into it. This is one of the most dangerous accidents that the attending physician has to meet, especially in the homes of the poor. If his hand is accidentally soiled it makes it very dangerous, indeed, to introduce the hand to remove the placenta and es-

pecially so if the hand must go the fundus to break up adhesions. The other hand should be substituted for the soiled one. This accident can usually be avoided if the bowel has been emptied.

If we will carefully supervise the pregnant woman, we will not only have her application, but will have the satisfaction of knowing that we have done our duty and are every inch doctors—doctors who are an ornament to the profession and a blessing to the women of Green county.

OBSTETRICS IN COUNTRY.*

By J. J. GIBSON, LEXINGTON.

At the outset of this short and I fear very uninteresting paper, to my more favored brothers of our most noble profession, I beg to offer an apology for undertaking to even write on such an important and interesting subject: when if properly handled by one who is thoroughly competent. But being assigned this subject by our much beloved and worthy president, I could not refuse to disobey his wishes.

In the first place I presume the majority of us begin our career in the country, where as we think our many blunders and sad experiences, maybe often overlooked, by more unfavored educational advantages and social refinements. But I wish right here to state, that such is not the case: The country is the place where the doctor must show his ability to master and control not only the many complications that may arise, but to convince those whose knowledge is far greater than we think. Still it is not uncommon for many cases to go on neglected to full term, with their urine loaded with albumin and their feet and ankles swollen fit to burst and are taken sick and give birth and make an uneventful recovery. But again I find them with slight symptoms of albuminuria, and as the labor progresses very often with the most favorable presentations, very suddenly and unexpectedly there is a shriek and cry which ushers a very severe convulsion and frequently followed by another and another until life is almost gone, before the attendant can get ready to control the grave symptom—which causes so much excitement and anxiety among the friends that if you are not very careful you may lose your own head. But I am glad to say with proper use of morphine and chloroform and veratrum have always controlled the symptoms until the causes could be eliminated.

* Read before the Fayette County Medical Society.

Then again to add more horror and far more responsibility to the unfortunate attendant, is to meet with a post-partum and to be unaided by not having the assistance of a trained nurse to help you, with no conveniences other than a wash tub or some other waste bucket in which to get rid of all this blood.

Gentlemen I want to say that I have seen nothing yet that was more appalling to witness, than one of those severe post-partum hemorrhages, which occurred in my practice some two years ago, the extreme restlessness, tossing the arms and convulsive movements of the body, the respirations so gasping and sighing, the pulse was so rapid and feeble that they became almost imperceptible. Gentlemen this accident or complication gave me more shock than any other thing I have ever met, but as formidable as the symptoms were it is very satisfactory to know she did finally recover, after weeks of faithful nursing and proper medication.

Then again we often meet with abnormal presentations for instance prolapse of the cord, or one of those shoulder presentations which we all know 'tis very dangerous and very unpleasant to meet with even under the most favorable circumstances. I have found it a difficult task to perform version even with the membranes intact, much less to occasionally meet with one imbedded deeply in the pelvis, with the amnii all gone and the mother suffering almost continuously with expulsive pains, and then be out 12 to 15 miles from town and can't possibly get help for two and one-half or three hours. Then what are you to do. Gentlemen, I want to tell you here is a picture worth while your study, and one that will soon let you know if you are worthy to be called an M. D.

Down in the hills along the Kentucky river and its noted tributary, Boon's creek, the people as a rule are very poor and are continually trying to get through with some old woman who is more dangerous than a rattle snake, thoroughly incompetent and wholly unconscious of her poisonous hands and modes of procedure. Gentlemen I often find these meddling grannies pouring red pepper, suet and many other hot teas down the poor helpless creatures to cause her to get through they say even when the external os has not dilated anything like the size of the silver dollar. Now these are some of the samples of obstetrics in the country. Now I wonder how few of you are not surprised to hear, when I tell you I have treated over thirty such cases, taken charge of from these

old grannies in the past fifteen years, that I have only lost two and they died from sepsis. In one of these I finally succeeded in about one-half hour's work to empty the uterus of a decomposed placenta, six days after the birth of the child. In this case I will say something of my treatment, to all of which was in vain. After cleansing the uterus and douching out thoroughly with one to 3000 bichloride solution once a day for three days, each time packing the uterus well with a 10% iodoform gauze, there were no improvements in symptoms, during these three days and the following three days. The internal treatment consisted of quinia-sulphas grains iv, salol grains iiss, every three hours. Stimulating alternately with whiskey, two tablespoonfuls and strychnia 1-60 every six hours, ice pack occasionally to head for high temperature and delirium. For six days she suffered before the end came. In all of my puerperal cases that were followed by sepsis, all save one more have recovered from three to six weeks from the above treatment, with slightly modifying treatment in some, eliminating the poison, by free perspiration, and gentle purgation with mild chloride occasionally.

Now this is a history of my experience of one to two cases out of every ten to fifteen in the country every year, following up these old grannies.

Now for my own individual cases of sepsis following in my own patients I have nearly always traced the infection before delivery to the mother making frequent examinations of herself, or not keeping the absorbent cotton pads changed often enough after delivery, which I am glad to say hasn't occurred more than five or six times in my fifteen years practice. Perhaps you will be equally anxious to know something of my general management of all my obstetrical patients.

On arriving at the home, I first take the temperature, then the pulse, then thoroughly disinfect my hands and arms to elbows, then proceed to give the external genitals of patients a thorough but gentle scrubbing unless I am reliably informed that it has been done before my arrival. I then disinfect myself again, by washing with soap and carbolic acid 1 to 30, or bichloride 1-300. After cleansing my finger nails and gently mopping them with tinct. iodine, more for my own protection than that of the mother, I proceed to find out the presentation, the amount of rigidity; then proceed next to ascertain the length and diameters of pelvis, if bowels haven't been emptied in last hour or

two I then always cause to be given an enema, and keeping track of bladder being emptied every thirty minutes until completion of second stage. I never undertake to deliver the placenta under fifteen minutes unless there is some hemorrhage. In case there is laceration of perineum to the extent of one or more inches I always bring the parts together with silk with from two to five interrupted sutures, always removing them in five to seven days.

In discussing this paper if my hearers think it worthy I want to hear their views why it is in stitching up the lacerated perineum that on one side of the tear it gives no pain and on the other it does.

THERAPEUTICS OF WHEAT DOUGH WITH REPORT OF CASE.*

By A. S. COOK, MONTICELLO.

This dough is used to control hemorrhage from injury at any part of the body where it can be applied. In the practice of 47 years I have never read of anything half its equal. I have used this dough for the last eight or ten years, and wish to give to the profession several cases treated by the dough. No. 1—boy 14 years old. He was making a crossbow, knife slipped and stuck into inside of thigh; the hemorrhage was profuse. I applied wheat dough and bandage; no further hemorrhage. No. 2—a young man shoeing a horse, nail cut his arm, he himself a bleeder, several things tried with no effect. I applied the dough and bandage, not a drop of blood lost after application. No. 3—a man had tooth pulled, hemorrhage would not stop, many things applied, still blood flowed. Applied dough over cavity; no further hemorrhage. No. 4—a man split his shin with an ax, he was away from home at the time, had to walk in, causing him to lose considerable blood, was still bleeding when I reached the home, removed rags, applied dough and bandage, no further hemorrhage. No. 5, Cord snapped off even with belly when a child was born, applied dough and bandage, no hemorrhage. No. 6—a long cut with knife commencing four inches below elbow in front. It took thirteen stitches to close the wound. Dough and bandage applied, no further hemorrhage. This man says if he had lost few more ounces of blood he certainly would have died. He had bled until he was blind and cold as a snake. No. 7—a man fell into a wheat thresher, the knives that cut the binds struck him four inches above elbow, cut down to about four inches below el-

bow. He lost a great quantity of blood before I saw him. Wound stitched up, dough and bandage applied, no further loss of blood.

This dough and bandage can be applied to most any part of the body successfully. Suits secondary hemorrhages when parts are inflamed, as does not give any pain, and at the same time completely controls the hemorrhage. Every physician ought to know the great value of this simple remedy so he could stop all cases of hemorrhage at once, then get ready for his amputation, if necessary. A great many die on the amputating table from the loss of blood before they reach the place for operating. First apply the dough and not a drop will get from under the dough. I was in practice for thirty-five years before I got to feeling easy when I started out to see a patient cut up. Now I am as calm as the sunshine of yesterday. I know I can stop the blood from coming out of wound, now stop blood from getting into parts and you have done your duty.

Before I close this article I want to give you a few cases I had before I learned this great remedy. I have seen many cases of injury that had lost great quantities of blood, wounds tied up with rags, soot and everything, so bloody I must confess I would feel a little nervous, afraid before I could tie the blood vessels he might lose too much blood. Now I feel like I am master of the situation, I trust my pocket case and dough and fear no danger. I have heard of people bleeding to death from injuries. I have never seen a case, don't expect to so long as wheat dough can be had. I could give you many cases where I could have used this dough to the benefit of patient and great relief to my mind. No. 1—a man shot a whole load from a shot-gun through palm of hand. Secondary hemorrhage came on; I had to use tourniquet and sit up all night. Now if I had known about the dough, could have checked hemorrhage at once, gone to sleep, knowing all would be well in the morning. No. 2—Dr. J. W. Castello and I amputated a half of small boy's foot. We could not find arteries and left it open for some time, finally dressed it without finding vessels. The doctor remained 24 hours with patient watching for hemorrhage, but it never came. Now in this case the wheat dough could have been applied and we could have gone away perfectly satisfied as there was not the least danger from hemorrhage. It is not necessary to multiply cases, for one trial will satisfy any man.

* Read before the Wayne County Medical Society.

ACUTE NEPHRITIS.*

T. D. HOUSE, HOPKINSVILLE.

There is in my judgment no subject with which the general practitioner should be more familiar with than the subject head of this paper. Namely: Acute Nephritis; the principal causes of which are, exposure to cold and wet. It is very common after over-indulgence in alcoholic drinks and exposure. Also we have the poison of the specific fevers; scarlet fever, first of all, typhoid fever, measles, diphtheria, smallpox, chicken-pox, malaria, cholera, yellow fever, meningitis, and dysentery, may be with syphilis, and acute tuberculosis, acute tonsilitis and septicaemia.

We have the toxic agents: Turpentine, cantharidies, potassium chloride and carbolic acid.

The next have it associated with pregnancy. We may have in connection skin lesion. In this trouble, the kidney may present to the naked eye in mild cases, no evident alterations. When seen early in more severe forms the organs are congested, swollen, dark, and on section may drip blood. In other instances, the surface is pale and mottled, the capsule strips off easily and the cortex is swollen, turbid and of a grayish red color. While the pyramids have an intruse beery red tint. The glomeruli in some instances stand out plainly, being deeply swollen and congested; in others, they are pale. In the majority of cases due to toxic agents, which reach the kidney through the blood vessels; the tufts suffer first, and there is either an acute intracapillary glomerulitis, in which the capillaries become filled with cells and thrombi, or involvement of the epithelium of the tuft and of Bowman's capsule, the cavity of which contains leucocytes and red blood corpuscles; Hyaline degeneration of the contents and of the walls of the capillaries of the tuft is an extremely common event; these processes are best marked in scarlatinal nephritis; there may be proliferation about Bowman's capsule. These changes interfere with the circulation in the tufts and seriously influence the nutrition of the tubular structures beyond them. The alterations, in the tubular epithelium consist, in the cloudy swelling, fatty change and hyaline degeneration. In the convoluted tubules the accumulation of altered cells with leucocytes and blood corpuscles causes the enlargement and swelling of the organ. The epithelial cells lose their structure; the

nuclei are observed, and hyaline droplets often accumulate in them. In the milder forms a simple inflammatory exudate serum mixed with leucocytes and red blood corpuscles exists between the tubules. In severer cases areas of small celled infiltration occur about the capsules, and between the convoluted tubes. These changes may be widespread and uniform throughout the organs or more intruse in certain regions. The locality most often involved is that of the convoluted tubules and the glomeruli.

Symptoms.—The onset is usually sudden, and when following cold, dropsy may be noticed within twenty-four hours. After fevers, the onset is less abrupt, but the patient gradually becomes pale, and a puffiness of the face or swelling of the ankles is first noticed. In children there may at the outset be convulsions; chilliness or rigors initiate the attack in a limited number of cases. Pain in the back, nausea, and vomiting may be present. The fever is variable. Many cases in adults have no rise in temperature. In young children with nephritis from cold or scarlet fever, the temperature may for a few days range from 101 degrees to 103 degrees. The most characteristic symptoms are the urinary changes. There may, at first be suppression; more often the urine is scanty, highly colored, and contains blood, albumin and tube casts. The quantity is reduced only four or five ounces, may be passed in twenty-four hours; the specific gravity is high, 1,025, or more; the color varies from a smoky to a deep porter color, but is seldom red.

Anemia is an early and marked symptom. The pulse may be hard; the tension increased, and the second sound in the aortic area accentuated. The skin is dry, and it may be difficult to induce sweating. Uraemic symptoms develop in a limited number of cases. They may occur at the onset with suppression; more commonly later in the disease. In many of the febrile cases, dropsy is not a prominent symptom and the diagnosis rests rather with the examination of the urine. In other cases as in the acute nephritis of typhoid fever, there may be haematuria and pronounced signs of interference with renal function. The most intense acute nephritis may exist without anasarca. Diagnosis: It is very important for us to bear in mind that the most serious involvement of the kidneys may be manifested only by slight oedema of the feet or puffiness of the eyelids, without impairment of the general health. The first indication of trouble may be a uremic convulsion. This is particularly the case in the

* Read before the Christian County Medical Society, September 16, 1907.

acute nephritis of pregnancy. Where it follows cold or scarlet fever, the symptoms are usually well marked and the diagnosis is rarely in doubt. Every case in which albumin is present though, must not be called acute Bright's disease, not even if tube casts be present. We have the febrile albuminuria, and although it represents the first link in the chain of events leading to acute Bright's disease, it should not be placed in the same category. Prognosis is bad; the patient dying either in the acute attack or from the chronic nephritis that follows; in many cases, however, life may be prolonged for a number of years.

Treatment: The patient should be put to bed on a milk diet. In mild cases the liberty of the house may be allowed. The bowels should be kept open, and the skin active by hot baths, and the patient should drink freely of water or lemonade, thus keeping the kidneys flushed, and washing the debris from the tubes. We must, then, I think advise the patient to seek a warm dry climate and there, meet the indications as they arise.

CHOLERA INFANTUM.*

BY J. H. RICE, HOPKINSVILLE.

Cholera infantum is an acute catarrhal inflammation of the mucous membrane of the stomach and intestines, together with an irritation of the sympathetic nervous system, occurring in children during their first dentition; characterized by more or less abdominal pain, vomiting, purging, febrile reaction, and great prostration.

Etiology: Under this head may be mentioned; age, surroundings, general health of the child, dentition, hot weather, improper feeding, neglected diarrhoea, germ infection, and negligence as to the cleanliness of the child's person, clothes, etc.

Pathology: We usually find the mucous membrane of the stomach and intestines pale, unless the disease is ingrafted upon some other pathological process, then we may find severe catarrhal inflammation, old ulcers, or a general and intensely diffused gastro-enteritis; with swelling of the mucous membrane and Peyer's patches. But it is not so much a derangement of the mucous membrane as it is a toxic state of the whole system.

Symptoms: The onset may be sudden, frequently occurring at night, with vomiting and purging. It usually begins, however, on a previous diarrhoea. The stools occur every

half hour to one hour, and are watery. The color, at first, may be pale green, yellow, or brownish, but soon changes to a clear and serous discharge. They are usually odorless, but may be exceedingly offensive. Vomiting is persistent. Thirst is excessive. Fluids, especially ice water, is taken greedily and immediately rejected by the stomach. The pulse is very fast and feeble. The skin may be cool and bathed with a clammy sweat, while the rectal temperature is 103° F. or higher. The urine is scanty and very highly colored. Indeed, it may amount to almost complete suppression, owing to the great amount of water eliminated by the bowel. The child may at first be irritable and restless, but it soon passes into a listless condition; or as the disease progresses it may pass into a comatose or hydrocephaloid state. The appearance of the child is greatly altered. The loss of weight and strength is marked, owing to the drain upon the fluids of the body. The face is of an ashy pallor, with an anxious expression, sunken eyes, and pinched features. The fontanelle is depressed. The head may be drawn backward, the abdomen retracted, and the respiration irregular. There may be muscular twitching or convulsions. If the trouble terminates unfavorably, the vomiting stops, the child is clammy; its feet, nose, and breath become cool. The patient sinks into a state of coma; death comes quickly. If recovery takes place there is a gradual subsidence of these alarming symptoms and the child enters upon a slow and tedious convalescence.

Diagnosis: Keeping the main symptoms in mind, it would seem that there would be but little trouble in the matter of the diagnosis. Yet, if the authorities are to be relied upon, we find that there are errors made quite frequently. According to Holt only about 2% of all bowel disorders are cholera infantum. Remembering this and the most prominent symptoms—vomiting, purging, great thirst, fast and feeble pulse, cold and clammy skin, high rectal temperature, anxious and altered appearance, rapid emaciation, sunken eyes, and pinched features, the retracted abdomen and irregular respiration together with the great prostration, we can not see why errors in diagnosis should be frequent.

Prognosis: This depends largely upon the vitality and the previous health of the child, the virulence of the attack and the degree of intelligence used by the physician and nurse in combating the disease. If the child is already debilitated from any cause, its chance for recovery is very much lessen-

* Read before Christian County Medical Society, September 16, 1907.

ed. Or if intelligent management of the case is not instituted early, of course the prognosis is not so favorable again. But with the most intelligent and early management, the most favorable surroundings, and with a child with previous good health and strong vitality, the disease is still to be dreaded. The mortality of artificially fed children is given at 90% to 95%. While those naturally fed it is low. Early convulsions or coma renders the prognosis very bad, as it shows the excessive absorption of the poisons into the circulation.

Treatment: Much more may be done in the way of prophylaxis than in any other. City children should be sent to the country during the hot weather in their first and second summers when possible. Or if their parents can carry them to the sea shore well and good. But this is not always practical, indeed, in the great majority of cases this is an impossibility. But every parent owes it to his child to make its surroundings as cool and pleasant as their means and circumstances will permit. Much may be done along this line if we can only get the laity to once understand its importance. The child's clothing should be light and cool and changed to suit the conditions of the weather. All soiled napkins should be immediately placed in a disinfecting solution. The child should be frequently bathed. The surroundings of every home should at all times be well kept, clean and airy, but in no condition, perhaps, is this of more importance than to the infant during the hot weather. The baby should occupy the coolest and coziest room in the house. Of course their exposure to the heat of mid-day is to be avoided, but should be kept in the open air early in the morning and late in the afternoon. If the baby is breast fed, it is much easier to regulate its feeding. A very little instruction to the intelligent mother as to the amount and frequency of its nursing will suffice. But if the child is artificially fed, the problem becomes very much more complex. The modification of cow's milk is a problem that must be worked out for each individual case. And it will require careful study and supervision to arrive at the proper amount or per cent. of each constituent best suited to each case. But as it is not the intention of this paper to discuss infant feeding, I will dismiss this subject by saying, that due attention must be paid to the milk, which should be procured fresh and perfectly sweet from a reliable source. And any and all articles used in its modification should be pure. The bottles, rubbers, etc. used should

be kept clean, sterile, and well aired. Another matter that naturally presents itself in discussing this prophylactic treatment is, the milder bowel disorders. A great many mothers think that a diarrhoea in baby does not amount to much. That it most always has trouble with its bowels when it is fixing to cut a tooth. It is this neglected diarrhoea that is responsible for the greater part of our cases of cholera infantum. This point cannot be too forcibly impressed upon the laity. If the public in general could once become convinced of this fact much suffering and the loss of many lives could be saved, especially among the poor in the crowded city. Another point that might be emphasized in this connection is, for the profession to encourage mothers to nurse their children when possible. Too many mothers are ready with the least possible excuse to put their babies upon the bottle. I do not mean to say that this is not sometimes advisable, but should only be encouraged when some special indication arises, with which every medical man is familiar.

Active Treatment: Given a case of cholera infantum the treatment should be active and vigorous. No half hearted measures will suffice. You have a little patient that is sick unto death and what you do must be done quickly. First, all foods should be prohibited. Cold water should be given frequently, in small quantities, to allay thirst and supply the great drain of fluids from the body. As the patient gets better the lighter and easier digested articles may be given, as whey, albumen water, barley water, etc. But we should remember, that digestion is almost or entirely arrested, and not be in too great a hurry to feed. Regarding the disease as an auto-toxemia, due to absorption of poisons from the alimentary canal, our first efforts should be directed towards elimination. This is best accomplished by washing out the stomach with a tepid solution of sodium bicarbonate 1 to 300. Then follow this with a thorough irrigation of the colon with a normal saline solution of 90° to 95° F. Having accomplished this we are now ready to begin the administration of the proper drugs. When possible we should administer our remedies hypodermically, as we get prompter results and at the same time are more certain. If the patient is restless and the diarrhoea very excessive, we should administer morphine sulphate gr. 1-100 to 1-200 and atropine sulphate gr. 1-1000 to 1-300 which may be repeated every hour till the desired results are secured. However we should be guarded in the ad-

ministratiin of all opiates; as they might check the secretions to such an extent as to interfere with the elimination, which is our best means to relieve the patient. Morphine furthermore by its sedative effect may produce a state of quietude and appearance of well-being that is very deceptive. Atropine, I believe to be a much safer and more efficient remedy; it invites the blood to the surface thereby favoring reaction; it will assist in quieting the peristaltic motion of the bowel; and at the same time it stimulates the cardiac action and respiration. These remedies should always be given by the hypodermic method. As soon as the stomach will tolerate any thing, small doses, of calomel should be given frequently for effect. Later, if intestinal antiseptics can be retained, they may be administered with good results. Each physician will, of course, have his pet remedy among this class of drugs. Personally, in this trouble, I think sulphocarbonate of zinc will meet the indication as well as anything else. After having attended to the elimination and antiseptics as indicated above there yet remains the following indications: First, stimulation and support; second, reduction of temperature; third, treat special symptoms. For the first indication, brandy, ether, camphor, strychnia, and glonoin is a list from which we may select our stimulants. In addition we should use the normal saline solution; injecting as much as one-half pint every twelve hours in the cellular tissues if the need is urgent. If it is not so urgent the same may be thrown gently into the lower bowel and allowed to be absorbed. This procedure not only adds fluids to the body; but at the same time, the blood vessels being fuller, acts indirectly as a heart tonic by giving the heart something to contract upon. It also dilutes the poisons then circulating in the blood. The points of benefit being so many from the normal saline injection, it should always be used.

For the second indication, the reduction of temperature nothing acts as well, usually, as the graduated bath; which should be used when the temperature goes to 103° or over. Begin with the water at 100°, and gradually reduce the temperature to 85°. Rub the patient's limbs and body briskly during the bath. In from five to fifteen minutes remove the child from the bath, dry quickly, and wrap it in a blanket. Try to get reaction. If it is not practical to use the whole bath, the pack may be employed. The use of the ice cap to the head and the injection of cold water well up into the colon are use-

ful auxiliaries to the graduated bath.

If the little sufferer shows signs of collapse, push stimulants boldly. For the cold extremities use the hot mustard bath, hot applications, hot water bottles, and if necessary the mustard paste over the entire body.

In no disease, perhaps, is there more room for the exercise of plain, good, common sense than in the management of this great and fatal disease of infancy. Let us not fight the disease itself and lose sight of the fact that we are treating a "*little patient*" who is sick with cholera infantum; and meet special indications as they arise. Let us come to the rescue of nature and assist her in every way possible; but let us not lose sight of everything except the disease itself, and forget the comfort and well-being of the little sufferer.

PUERPERAL ECLAMPSIA.*

By D. H. ERKELETIAN, HOPKINSVILLE.

The direct and potential action of the poisonous materials circulating in the blood over the nerve centres and a decided consequent relaxation of the nervous system through the process of general reflex action has been deservedly discussed and carefully observed by eminent neurologists since 1783. On the other hand the same phenomenon resulting from the extensive pressure upon the nerve peripheral ends also vaguely demonstrated by many authorities. However there remains in the domains of neurologic researches some obscure, complex or rather mysterious factor which brings about this most insidious pathologic condition which I have undertaken to discuss before you. Most of us have come in contact with this malady during our practice and realize its uncontrollable persistency and in most instances defying our arduous endeavors to save both the mother and the child, carries with it both of its unfortunate victims. In some cases the symptoms of the disease reveal itself at once while on others some fore-running prodromal symptoms will lead into general convulsions. I came in contact with two cases of puerperal eclampsia in my practice in both of which the true convulsions appeared after a few prodromal symptoms presented themselves. The disease will manifest itself mostly in robust young or nervous primipara, though multipara sometimes being subject to it, especially at the period of dilatation and expulsion.

If the onset is not insidious there will be visible such symptoms as pain in the epi-

* Read before Christain County Medical Society.

gastrium, nausea, a feeling of heaviness, illusions of senses, pain in the head, ringing in the ears, slight or large swelling around labia, tingling and numbness over the extremities and swelling of the ankles. When above symptoms during actual labor of primipara is accompanied with abundance of albumin in the urine, it will give us a fair warning of an expected eclampsia attack.

During the paroxysms she lies perfectly still and straight on her back, her eyes well fixed to a point motionless. Following this you will observe slight movements of her head and eyeballs. Clonic and tonic muscular movements of the limbs, fingers tightly pressed on the palm of her hand. In a few seconds she becomes motionless though semi-conscious. A frothy saliva flowing from her mouth. This condition in some instances terminates in perfect consciousness and labor continues if not a fresh attack presents itself. Let us remember the fact that this one single convulsion will have a decided effect over the heart, it remaining weak and accelerating while similar additional seizures will eventually weaken the patient to a marked extent. Death may result from asphyxia during paroxysms or serous infiltration and an anemia of the brain. Cerebral inflammation or pulmonary oedema. At any rate we will observe out of a pure physiological process a pathological condition to treat. The horrors of a broken-down nervous system resulting either from the poisons eliminated from the kidneys or through the loss of nerve nourishing materials in the blood, will set us to thinking and acting in haste. I believe, taking everything into consideration, this is one of the most difficult cases a physician sits up to treat.

When I enter to discuss the etiological factors pointing to the formation of puerperal eclampsia there I may dangerously trod in the dark woods of diverse unfounded opinions, but there are some rounds by which we can safely reach to conclusion about its etiology. It is very clear to us that this phenomenon is a condition referred to some pathologic state of the nervous system only. It has been repeatedly proved by observations that there exists a close proximity between the nature of epileptic convulsions and eclampsia during puerperal period. At this point of my discourse I beg to draw your attention to a few important facts in epilepsy in order to facilitate our understanding the phenomena of eclampsia. It has been proved by observation that a great many epileptiform convulsions are the di-

rect consequence of slight irritations upon certain nerves or nerve centres, or a disease of the spinal cord or of its membrane may be the primitive origin of a true convulsion. There are many instances in which a slight pressure or irritation on a centripetal nerve especially to its peripheral ends has produced epilepsy. Such as worms in the bowels, calculi in ureters or in biliary duct, foreign bodies in the ear, tumors pressing over the nerves, tumors in the brain, etc. Therefore we can safely conclude that epilepsy is a phenomenon in which we find a general increased reflex excitability of certain parts of the cerebro-spinal axis, necessarily followed by temporary loss of consciousness, in other words—loss of function of the cerebral lobes.

In puerperal eclampsia we find a synonymous phenomenon. Great many authors have pointed out the urinary origin of this affection. They declare that in almost all instances there is an immediate association of albuminuria with eclampsia, but it can not be positively stated that all pregnancy loaded with albumin has resulted with eclampsia. The most peculiar excitability of the nervous system of puerperal women similar to that of nervous system in infancy being clear to us we will have to look for some other cause which put this excitable nervous system of a pregnant woman into a morbid action. One fact is plain to us out of these complex conditions of affairs, that—in all primipara of nervous temperament where there is any signs of Bright's disease or any tendency to produce extreme anaemia in nerve centers there we will find her entire nervous system in a most suitable state to contraction. We cannot, under any circumstances overlook the mechanical action of pregnancy and parturition upon the nervous system. Such conditions as rigidity of the os uteri, abundance of amniotic fluid, abnormal presentations, manual interference or abundant hemorrhages, may tend to irritate the peripheral nerves and excite the entire nervous system, which has been rendered anaemic through the poisons circulating in the blood. Thus, to my mind, in order that the puerperal eclampsia present itself there must exist—1st, an extreme anemia of the nerve centers through the direct action of the abundant toxic material excreted from the kidneys; 2nd, an exciting pressure to the peripheral nerve ends to produce a reflex excitability of the nervous system.

The complex combination of these two factors will almost invariably result in eclamp-

tic seizures. In treatment two important points need to be considered,—how to clear out the system from ureamic poisons, and also how to relieve the exciting pressure. This is a most arduous task for the attending physician. At this particular struggle he will require great courage in attempting to save both the mother and the child. It is the undoubted duty of every physician attending a labor to equip himself for abnormalities. There is nothing particularly scientific to boast about delivering a child, it is a purely physiological process. The modern midwifery has been left in charge of the medical condition following some labors. Though I firmly advocate that all cases of labor should be left under the charge of women midwives who have thoroughly mastered the pathology as well as the physiology of labor, putting the words of the poet, Tennyson:—

“Fools rush in where angels fear to tread
Let no stranger trod where my own household abides.”

If the eclampsia begins during the expulsive period the prognosis is favorable, for in many instances the convulsions cease after delivery, but if the dilatation is slowly consummated as the result of deformity of pelvis or vicious position of the child, the prognosis is not favorable both to the mother and the child. The first thing that impresses me the most at the beginning of seizures is to realize the attitude of the child to the mother. Of course it is a great gain to us also to a great extent to our interest to save both parties concerned in the struggle, and it is more than a neglect of duty if we leave undone anything and everything that could be done to save the child as well as the mother, but it will be natural with us to think of the mother the most, though positively not neglecting the child. It is true that if these convulsions occur before the first period of labor or before the os is dilated there is little hope for the foetus to live to maturity. 1st, because of the close proximity of the maternal nervous system in the foetus; 2nd, on account of the toxic materials circulating in the foetal body; 3rd, because of the peculiar susceptibility of the foetus nervous system to convulsions. Furthermore, if even we succeed in saving the foetus at the expense of the mother it is more than doubtful if we will ever succeed in prolonging the life of the child, on account of the impure blood being loaded in his blood and in the tissues of his body. I believe it is our emphatic duty to empty the gravid uterus as

soon as we are convinced of the existence of a dead foetus. This process, however, must not be too rational, but in the line to assist nature in procuring an expulsion and also if it seems beneficial. In some instances labor continues favorably while convulsions occur, yet in others a slight interference will materially increase the seizures.

There are three good drugs which every obstetric case should carry—opium, chloroform, and bromide of potassium. The inhalation of chloroform is always indicated, as it controls the violent muscular actions. I do not keep the patient under complete anaesthesia, no need to do that. I think it is best to supply the patient with it freely in order to control the intensity of the recurring paroxysms. As soon as the prodromal symptoms begin, I administer these three drugs at once. I give 3 grains potassium bromide combined with a few grains of chloral through the mouth. This will be readily taken by the patient. If I am too late to administer bromide by the mouth I give chloral in the form of an anema. When the fits begin I apply chloroform not to an extent of complete anaesthesia, but enough to control the intensity of convulsions. But in order to control the muscular action so as to prevent the frequent paroxysms it will be necessary that narcosis be continued. For this purpose I give hypodermically morphine sulph. gr. 1-4 repeated every 3 hours. So that our main object in administering sedatives will be to control the paroxysms, and it, however administered, needs to be continued until the danger is entirely over. Our great dangerous symptom is complete suppression of urine. We can combat this danger by diuretics, also don't fail to pass a catheter. The bowels need be freely open from the early stage of labor, especially when the ankles begin to swell; then you need a free purge. Comp. jalap powders is a very good one for the purpose.

I cannot see a sensible adventure in the process of venesection, but am positive that certain well-selected cases, such as the existence of great cerebral congestion and vascular tension, a full bounding pulse, strong pulsation in the carotids, and if the patient be a strong and healthy woman such procedure judiciously used will materially give great relief, but it can never be looked upon as the process of cure. Because it is a physiological fact that soon after the bleeding the quantity of blood in the system reaches to the same amount, though the quality is changed. It brings about the same result in a very short time, and moreover the watery

condition of the blood will materially aid the danger, the blood pressure remaining the same. In conclusion I must add that we should be far more alert as to the course of treatment we should follow in each individual case of eclampsia that may come under our observations. We can not put a definite line of treatment for every case. If there is a malady in which the ability of a medical practitioner will reveal itself it is in the successful management of puerperal eclampsia. One great point we must never forget in managing a case of puerperal eclampsia. is never to allow other than pure medical opinions. This rule, in the rush of excitement has been repeatedly overestimated. In puerperal eclampsia, more so than any other acute disease the commanding attitude of the attending physician is highly important.

During the period when combating the seizures we will be naturally interested with the labor part. What to do with it? Must I interfere or not? We cannot lay a definite rule. In every instance look toward the welfare of the mother, without being unjust to the foetus. If the convulsions seem to increase by the pressure of the foetus, and if the head be within the reach, the forceps delivery or even craniotomy can be resorted to, but if slightest interference causes increase of the excitability of the nervous system, it will be wise not to interfere.

PROBILIN.

(Continued from October Issue.)

As per yours of December 22, we have made an analysis of Probilin pills bought in the open market by ourselves, and find the approximate composition of each pill to be as follows:

Phenolphthalein . . . . .	.008 gram.
Sodium salicylate . . . . .	.010 gram.
Sodium oleate and free oleic acid . . . . .	.100 gram.
Menthol . . . . .	.010 gram.
Moisture . . . . .	.006 gram.
Dusting powder . . . . .	.065 gram.

The dusting powder seems to have been made up of lycopodium, licorice and charcoal.

The results given, while approximate, are as close, we believe, as it is possible to make an analysis of this nature.

The average weight per pill is 3 1-16 grains; the heaviest of the dozen pills weighed was 3 3-16 grains, and the lightest 2 7-8 grains. The bottle contained seventy pills.

It is of course impossible to tell in a mixture of this kind whether the salicylic acid is positively free or positively combined.

The fact is that the alkali present is sufficient approximately to neutralize the acids found. While the pill is normally acid in reaction, the total acidity would correspond only to 1-6 of a grain of salicylic acid, so that it will be seen that, even if the entire acidity were attributed to salicylic acid, it is not sufficient to account for the presence of the amount claimed in the formula, without reference to the claim that it also contains an acid sodium oleate. Since free salicylic acid reacts with sodium oleate to form sodium salicylate and free oleic acid, we feel justified in concluding that the pill contains sodium salicylate, sodium oleate and a small amount of free oleic acid. You will note that the total amount of material claimed in the formula of the circular is $4\frac{1}{4}$ grains of active constituents in each pill. You will note that the average weight of each pill, as found by us, is 3 1-16 grains; this includes one grain of the dusting powder, which was actually separated and weighed, and identified as to its general nature. If, therefore, this one grain is deducted from the 3 1-16 grains it will leave 2 2-16 grains for the active principles of the pill. From this also should be deducted the $\frac{1}{8}$ of a grain of moisture, leaving less than 2 grains of medicinal ingredients, instead of $4\frac{1}{2}$ grains, as stated in the formula.

This analysis was confirmed in all essential points by another chemist.

It is evident that Probilin, as at present marketed in this country, does not comply with rules 1, 4, 5 and 8 of the Council. It is, therefore, recommended that Probilin be refused recognition. It is further recommended that this report be published in The Journal of the American Medical Association.

The report was adopted by the Council.

W. A. PUCKNER, Secretary.

Comments.

The above report is not creditable either to the manufacturer of this product or to the American agents, nor is it particularly gratifying to American physicians or pharmacists. Probilin seems to be an excellent example of a certain class of "made in Germany" nostrums, to which physicians have given altogether too liberal endorsement, principally, perhaps, because it is not always easy to differentiate between the good and the bad products, which are advertised as having the endorsement of German scientists. The principal point in the above report is so simple that even a child could understand it. The active ingredients, according to the formula circulated by the American agents amount to 275 mg. or $4\frac{1}{4}$ grains per pill. The pill, as found

on the market, weighs only 210 mg., of which only 150 mg. are active constituents. It is evident, therefore, that the pill cannot contain what the formula calls for. In other words, if the formula for Probilin pills as given by Wilcox and published by Schering & Glatz is correct the pills would weigh much more than they do weigh.

It is rather disconcerting to our pride as American physicians to note that this nostrum is evidently made especially for the American market, since careful research through German text-books, lists of new remedies, price lists of German wholesale druggists, etc., fails to reveal any evidence that this preparation is used and recognized in the land of its origin. One naturally asks: Are German physicians too careful to be decoyed into the use of pills, which have an actual weight of only three-fourths the amount of the active ingredients indicated by the published formula?

Another fact is worthy of mention. The American agents of Probilin lay great emphasis on the fact that these pills are difficult to prepare. This is unquestionably true, for if the formula as circulated by them is followed it is not only difficult, but impossible to dispense them, since a soft, pasty mass would result, from which it would be impossible to make pills without the addition of other substances. It is, however, a simple matter to make pills having the composition of the Probilin pills as they are sold by Schering & Glatz. Neither will there be any difficulty in making the pills if the substances as recommended in German journals, only garbled accounts of which have been published in this country, are directed to be used. In this respect Probilin resembles Camho-Phe-nique, which was discussed in the Journal not long ago (April 20, 1907, p. 1365). In both instances an endeavor to compound the preparation from the formula furnished resulted in failure to produce anything like the product advertised.

In conclusion, there is another very important fact which Probilin illustrates. A physician, relying on false formulas furnished by proprietary medicine companies, is often led to false conclusions regarding the dosage and effectiveness of certain drugs. In prescribing Probilin he is led to believe that he is administering one grain of phenolphthalein to each pill, when, according to the analyses, he is giving only one-eighth of a grain. If, now, he desires to prescribe phenolphthalein in some other form, he naturally follows the experience (?) which he thinks he has gained for its use in Probilin. He, therefore, orders phenolphthalein in doses based on the amount which he thinks he gave before, and thus gives eight times as much as he really had

been giving in the form of Probilin. This is not only a hindrance to scientific progress, which is always based on truth, but it may lead to serious if not fatal injury. Aside, therefore, from the question of honesty or dishonesty on the part of the manufacturers, is the positively harmful influence on rational progress in medicine that results from deceptive and misleading statements regarding the quantities contained in various preparations.

COUNTY SOCIETY REPORTS.

Adair—This, (Sept. 12), is the day for our county society to meet, but although the day was ideal, there were only two members from the county, and only three from the town. We had barely a quorum. Two papers were read and discussed. One by William Blair on "Humbugs, and Their Uses," the other by U. L. Taylor on "New Remedies." They were both freely discussed. J. H. Grady who left here for Monticello a year or two ago, has returned, and located for life.

U. L. TAYLOR, Secretary.

Bracken—The Bracken County Medical Society was re-organized at Brooksville July 27th with the following officers:—D. J. Wallin, president, E. C. Johnson, vice-president; V. E. Smith, secretary and treasurer; C. H. Wallin, delegate, and N. A. Jett, W. I. Berry and E. E. Corlis, board of censors.

J. E. Wells, of Cynthiana, councilor of this district was present and addressed the society, strongly urging the necessity of medical organization. It was decided that the society meet on the second Wednesday at 7:30 P. M. in each month. Pursuant to this decision the society met at the court house, Brooksville Wednesday evening, August 14. A. D. Murphy, of Cincinnati had accepted an invitation to be present and address the society, but a letter from him, read by the president announced that on account of sickness in his home he could not be present, but hoped to meet with the Bracken County physicians at some future date. After the regular order of business and a free discussion for the good of the society, all repaired to the jury room of the court house, where the program committee had an elegant supper served. The following physicians of Bracken county are members of the society:—D. J. Wallin, C. H. Wallin, E. E. Corlis, E. C. Johnson, W. I. Drewry, N. A. Jett, M. A. Yetton, M. A. Aulick, J. L. Yetton, and V. E. Smith.

"Typhoid Fever" will be discussed at next meeting of the society Sept. 11th, 7:30 P. M., at the court house, Brooksville.

V. E. SMITH, Secretary.

Jefferson—

Presentation of Pathologic Specimens.—Ectopic Gestation.

Dr. Zimmerman: This specimen that I have to present is one of an intraligamentary ectopic pregnancy—a condition which is very rare. The patient was 2 years of age, married two years and had one miscarriage at six months. This was last October. The following February she missed a period—went over a period about two weeks and then began with what she thought was an abortion. She had no physician at the time. She had profuse hemorrhage, pains and passed clots and so on. This condition kept up, bleeding at intervals until I saw her on the 18th of June when she was suffering with a great deal of pelvic pain, or abdominal pain in the lower segment and had at the time I first visited her a temperature of 101. She had been up and around the house up to that time. The history of the case, with the presence of fever, pain and so on led me to suspect that probably she had miscarried and this had been followed by infection and that the bleeding was caused by an ordinary endometritis and retained secundines. Upon examination a little mass could be felt in the right ilias region which afterwards proved to be the tube. It was movable and was especially tender. Further examination showed the uterus somewhat enlarged, the cervix rather soft, pressed down, rather adherent, not freely movable and the cervix resting well up under the symphysis. She was put in bed and watched for about three or four days. The temperature continued over 101 and there was a marked increase in the size of the mass. This little mass could be still felt, but the uterus kept crowding down more and more, the cervix pushing forward and what appeared to be the fundus of the uterus in the cul-de-sac. I advised that she be taken to an infirmary and on the second day after being there Dr. Gilbert say the case in consultation with me and agreed that an operation should be performed. This was on Wednesday. The husband having to leave the city on Thursday would not allow an operation on Friday. On Thursday morning the patient suffered a collapse with severe pain in the region of the bladder and rectum. I saw her and told her that an immediate operation was demanded. She was not, however, in condition, and not disposed to have it done until the next morning when the husband came into the city. He came in and gave his consent and the operation was done. Upon opening the abdomen this mass was found. It was much larger than is represented here. This proved to be the tube on the right side and the entire right side of the pelvis was filled up, and, posteriorly, filling the cul-de-sac was this mass which consisted principally of blood clot.

The mass was tightly adherent to the rectum and also to the posterior uterine wall; it was dissected off and ligated and the entire mass taken out. You can see by examining the specimen here that there is no line of demarcation showing adhesions around the tube. The peritoneum of the tube was continuous with the peritoneum of the mass, showing that it was the intraligamentary form of tubal pregnancy. The rupture occurred here into the broad ligament. The entire mass was taken out and the wound closed with drainage. The woman left the infirmary on the 15th day and has had no trouble whatever following the operation. There were no adhesions in the pelvis. The other tube and ovary were normal. The sac has been filled with paraffin. The foetal structure are in the tube here. The foetus had apparently been digested.

J. R. Wathen: These specimens of hypertrophied prostates which I exhibit to the society tonight are some that I have selected from my collection in order to illustrate the various types of enlargement, most frequently met with and to show the resultant pathological specimens after the different surgical methods of removal have been employed. These do not include types of malignant, tubercular, syphilitic or gonorrhoeal prostate and are confined to the hypertrophied or adenomatous variety of enlargement which constitutes the larger number of cases seen. The gross appearance of the specimen removed bears a direct relation to the method of its removal and these conditions are made possibly by the complex, and, until comparatively recently, little understood, anatomy of the structure of the prostate. In order to make clear my point before exhibiting the specimens I would briefly call your attention to some drawings of the hypertrophied prostate showing in cross section the pathological anatomy of this organ which seems to differ much from the normal anatomy as I have been led to believe from my own observation and the writings of others.

Freyer says, "A careful examination of the specimens removed in those operations throws an entirely new light on the anatomy of the prostate and its relation to the surrounding structures, and shows that the descriptions contained in the anatomical text-books generally are incomplete and erroneous in treating that organ."

Before I take up this relation of the anatomy of this subject I have some drawings which I hope most of you can see from this distance as they are made rather large. In this upper drawing at this point which most of you can see we have a large fibrous capsule. This capsule contains a venous plexus well supplied with blood vessels. Between this capsule and the prostate proper is a space; then over the prostate direct-

ly we have the true capsule of the prostate. These structures are the ejaculatory ducts carried high up and elevated because of the adenomatous enlargement. This is one of the features which causes urinary obstruction and residual urine to a large extent. We notice the enlargement of the prostate in cross section. Here we see it is largely posterior to the urethra. The urethra is carried over and forward in such a way that the prostate causes the amount of residual urine which we have. Now, take another view of the prostate from the bladder down in the other direction. We will notice that it enlarges in the direction of the bladder because it is the line of least resistance. The downward movement is prevented by the triangular ligament.

Now, I wish to show from my specimens that the so-called middle lobe of the prostate is not really a middle lobe in the proper sense and what we have is a prolongation of the lateral lobe. This specimen has been carried forward and over, and it beautifully illustrates the so-called middle lobe. I fully realize that in this description of the anatomy of the pathologic specimens the theory I take is in opposition to that taken by a good many authors and I wish to demonstrate my own ideas based upon these pathologic specimens and also the work of others along this line.

Another significant fact is that the tendency a few years ago was to consider these enlargements as adenomatous; now the pendulum has swung around and many regard them as entirely gonorrhoeal. The specimens I show to-night are merely selected as adenomatous types. In the history of these particular cases there is no history of gonorrhoea. Most of these men lived in the country; they were old men who gave no history of gonorrhoeal infection; some of the cases operated on have been complicated by gonorrhoeal infection, and we operated on a young man for a form of pure gonorrhoeal prostatitis.

We have spent too much time studying the different methods of operation, one favoring the suprapubic, the other the perineal method. I have claimed that the operation depends upon the pathology. The pathology differs widely in these hypertrophies. When we take up this specimen here you see it was removed by Young's method. Now, in these specimens removed by Young's method one mass is a little larger than the other. Here is a specimen where we have a prolongation of this lobe; we have a middle lobe involvement removed by Young's method.

Now, then when we take the method of Goodfellow who was one of the earliest operators we have a median bar situated in these cases.

This comes out with the two lateral lobes and the floor of the urethra is brought out. Now, then we can see another type of prostate which cannot be removed by any of these methods; this is the cirrhotic prostate which is more of a fibrous condition; there is not so much an enlargement of the prostate as an obstruction to urination.

Here is a type removed with the capsule. In order to do this we apply the suprapubic method. We go above and slit through the mucous membrane of the bladder coming nowhere in contact with the fibrous sheath getting a plane of cleavage and bringing out the true capsule. The true capsule is shown on the surface here. These prostates rise high up into the bladder and cause a large amount of residual urine. Here is another specimen showing a middle lobe removed by the suprapubic method. It shows where the obstruction occurs typically. The middle lobe of the prostate is seen when we open the bladder.

These specimens have been kept in strong alcohol and are about half their original size. Here is another type removed by the suprapubic method corresponding somewhat to morcellation by the infrapubic route. The first one removed by morcellation is a hard one; this is a soft one. There was no line of cleavage and we had to take these out in sections and pieces. Frayer calls attention to this method.

Dr. Schachner: I think it was Frayer if I am not mistaken who made the comparison between the prostate and an orange in this way. Of course it is only in a gross way. We have in the orange a rind and after we peel the rind from the orange we have the orange perfectly intact with a true capsule. That is a very practical point and a very graphic and striking way of putting it. Between the rind of the orange and the true capsule as the doctor showed in his drawings there passes a plexus of veins that brings the blood from the wall of the bladder and it is the enlargement of the prostate encroaching upon this space and compressing these veins that is largely responsible for the degenerative changes occurring in the walls of the bladder, so that this complex condition known as prostatism which consists of an interference of the contractility of the wall of the bladder—an interference with the contractility so far that the bladder is not able to maintain its ovoid shape the neck of the bladder being held up against the pubes, the base sinks down and the retroprostatic pouch is caused from lack of tone.

When the prostate enlarges—and I think in discussing prostatectomy and prostatic operations the whole time ought to be spent on the pathology—it compresses these veins and we have circulatory disturbances and degenerative

changes which tell upon the musculature of the bladder and there is a sagging backward of the bladder and also in many a lack of resistance that makes the bladder susceptible to cystitis. I think that the late Dr. Bryson, of St. Louis, has pointed that out more clearly than any one who has written on the subject. That I think is the milk in the cocoanut. We should remember when we consider this subject that we have a degenerative trouble occurring in a degenerative age and that we expect a reasonable resumption of the function of the bladder, so far as the emptying of the bladder, the holding of the urine and so on, we cannot delay the operation too long for the simple reason that we have already a degenerative trouble and this is becoming more aggravated the longer the operation is delayed.

I agree with the essayist that the surgeon should mold his action according to the pathology with which he is confronted, as to whether the infrapubic or the suprapubic is the better method. One method is suitable in one case and not in another and so on. I think most men do a complete operation at one sitting and for my part I have always done this. It is such a simple thing to enucleate the prostate and it is done as a rule in so few minutes that there is a temptation to make one sweep of it and complete the work. I do not know, however, whether it is a good plan I have made up my mind that in other cases I could do differently. I do not know what the experience of others has been. Take an old man in a weakened condition where there is a high grade of cystitis, I cannot help but believe, though you can enucleate the prostate in four or five minutes, that it could be better to do a perineal section and wait ten or twelve days and do an enucleation. I believe that in old men with a high grade of cystitis it is best to do this operation in two stages. Do a perineal section and drain the bladder and allow it to get in reasonable shape; give the old man rest and get his in pretty good shape and then at the end of twelve or fourteen days go in and enucleate the prostate.

Dr. J. R. Wathen, in closing: I have very little to say in closing. I presented these specimens purely from the pathological anatomy of these parts. I have selected these specimens from my cases. Each is a type of a particular operation. We have passed the stage where we have a dogmatic method for removing these prostates—one operation for the removal of the prostate. I wish to say to-night that by a proper understanding of the real anatomy of these parts and the pathology we can deal with the condition as we meet it and in that way render proper service to the patient.

I differ with Dr. Schachner in regard to operating in two stages. I have thought that the

only cause of systitis in these cases was the formation of stone which occurs in fifty per cent. of the cases. In one third of the cases it is purely a mechanical obstruction of the prostate. I fail to see how drainage would drain the bladder. I have tried it myself and have never been able to drain the bladder without removing the prostate. It has been demonstrated by McGill, Deaver, Fryer and others that suprapubic drainage is far superior to infrapubic drainage. If we make a suprapubic and an infrapubic opening into the bladder the infrapubic opening will close and the opening above continues to drain contrary to the old law that water runs down hill. Therefore, drainage from a pathological and a practical standpoint is not indicated. The cystitis is not cured until the prostate is removed.

Essay on "The Medical Teacher,"* By M. Casper, Louisville.

I wish to precede the contents of this paper by the fact that I base the statements made, more from the standpoint of the student, than the teacher. Being young as a teacher, and not yet old as a student, I can better conceive of the good or imperfect qualities of a teacher, from the standpoint of the student, in which I am oldest. Also in presenting the present topic for discussion to the society, I wish to state that I do so because, this is a cosmopolitan medical society. As the subject is a live one and pertains to the future medical men (who are first students), it should be of interest to all classes of physicians.

In the recent consolidation of the Louisville Medical Schools, there is reason for rejoicing on all sides.

To the observing on-looker, the consolidation has been no surprise, as ever-changing conditions and requirements for the betterment of the American physician, to substitute for over-abundant quantity, proficient quality as it were, have made this change long since advisable, and recent increased entrance requirements have made it imperative.

We all gladly welcome these consolidations for we have the making of one or possibly two good schools in Louisville,—schools that could compare favorably with the larger Eastern schools, which are all well endowed.

All agree that one or two first-class schools are far better than twice the number of inferior ones; best for student, the profession at large, and will redound more to the honor and pride of our city and our State. The larger the matriculation, the higher the class of teachers a school can command.

* Read before the Jefferson County Medical Society, July, 1907.

Especially is this true where the financial life of a school depends entirely on the fees obtained from the student body.

I do not wish to be misunderstood as advocating that the best physicians always come from the larger schools; on the other hand, as we know that the best literary men often spring from the log cabin school, so can small medical schools often point with pride to men of rare skill and ability in the profession, who owe this particular, modest college, credit for their excellent beginning.

Examples are too numerous to admit of controversy on this point. Of course the large colleges have the advantage of procuring costly instruments and facilities necessary for minute experimentation, and original and individual research.

They have numerous other advantages, but the chief one is the compensation they can well afford to pay for teachers of quality.

To be a successful teacher, one must necessarily give much time to his subject. This, many practitioners cannot afford to do, and others don't care to do it. Many cannot afford to give their time to the pursuit of teaching gratis, on account of needing their time for the care of their patients, for it is necessary to properly care for them, for first, the duty we owe them, and secondly, if neglected, they will seek other doctors, and we thus lose practice which takes from our income and prestige.

Among these many are some good teachers, far more than are found among those who could afford to sacrifice their time for teaching, but do not care to for private reasons, which is often selfishness.

The successful teacher loves his work for the sake of the work, and the good that he can do. He derives a pleasure from the consciousness of bettering his future professional brethren by imparting necessary and beneficial knowledge to his students. Good teachers are scarce everywhere, but mediocre ones are always plentiful.

There may be many able practitioners and specialists too in a given city, but this does not necessarily signify that there are many **teachers**. It is a fact that all good practitioners are not able teachers, nor is a good teacher necessarily an able, successful practitioner.

A teacher may be termed as capable, not from what he really knows himself, but from the amount of knowledge he is capable of infusing into the minds of his students; or better, from what he is capable of getting the students to absorb from sources through himself, and sources other than himself,—the sum and total of the knowledge the student gets through the teacher as a sort of agent. Hence, it is the teacher who imbues into his students the most knowledge and

practical mental equipment, is the best teacher. So it follows that the school with the largest number of such teachers working in harmony is the best school.

All medical schools have some inefficient teachers, and all have some meritorious ones. Thus it would seem to follow that the more schools in a given city, the greater number of incapable teachers, and smaller number of able ones.

Here it is that consolidation gives more good men in a faculty, and as it is or should be, "the survival of the fittest," the inefficient ones in time will be dropped.

In consolidation, as in union, there is strength.

Any one familiar with the relative ability of the individuals of each faculty in our local schools for example, knows that each faculty may boast of three or four real good teachers, who compare favorably with any in the world, and that the majority of the rest are simply used to "fill in," and are not and never will be **teachers**.

Teachers in a way are born, not made, though, to be sure, they improve with experience, not necessarily with age. Teachers of just a few years experience often stand head and shoulders above others who have taught many years.

The best judge of the merits of a teacher is the good student who gauges him according to the amount he learns from him. A good student desires the following in a teacher, and the college should demand it:—

1st. Knowledge of his subject.

2nd. Ability to transmit that knowledge in a tangible form to the student.

3rd. Method.

4th. Adherence to subject.

5th. Punctuality.

6th. Mutual contact and acquaintance with the student. Knowledge, of course, is the first essential of a teacher, for no one can instruct on a subject that he, himself does not know.

Students always enjoy listening to a man with brains, the abler, the better they like him.

As before intimated, the most knowledge does not necessarily make the best teacher, but it is a valuable asset, and the ideal teacher possesses much knowledge.

He is thoroughly learned and trained not only on his own subject, but kindred branches as well. The best teacher must be a continuous student himself, if he would remain best.

Ability in presenting his subject is always a good quality for any teacher. He should be patient, energetic and persistent in his efforts to impress the student clearly and indelibly the part he is teaching. Many teachers are too quick to desist in their efforts, and pass over a given difficult point, and when the test comes, count the student dull for having failed to grasp the point. This is wrong, for one good sound point given a

class thoroughly and intelligibly is of far more value than a smattering of several points. Many teachers just cover the ground without halting to ascertain if the student is deriving any value of it or not.

This is especially true of those who rely entirely on notes, and simply read them off without inflection or pause.

Many teachers carry these notes over from year to year, and seldom add to or even read them over before the lecture, much less consult late authorities for advanced ideas. Is it not possible that these notes are a little stale or antiquated, especially on a live medical topic? A fresh note or two is all right. It often prevents the teacher from overlooking an important point; also a scheme or outline of a lesson is correct, but the teacher who carries a full line of notes, and reads them off year after year in a routine manner, does so to save daily preparation for the class as a rule. He thus cheats the students. It is not what the teacher goes over that counts for the student's educational advancement, but it is the part that the student absorbs and retains.

Thus, again it may be that the teacher whose volume of knowledge is comparatively small, and he teaches that little to his students thoroughly, and understandingly succeeds while his more learned brother with more wisdom and no skill of presenting it in a digestible form fails as a teacher.

Another admirable quality of a teacher is giving minute, though important details, and being able to spend fruitful time interestingly on practical, every-day subjects, and not requiring the elaboration on a Gastro-enterostomy, or the like, for his subject, to be interesting and instructive.

I have in mind a surgeon in New York, and one in Philadelphia, who are eminently successful teachers, this being the strong point of each.

Method: This division will fill a book and is so diverse that it can only receive an unjust consideration in a limited paper.

Each teacher's method probably varies somewhat. The method should adapt itself to the teacher's individuality, and should conform to his subject. Each branch requires methods of presentment peculiar to itself. One thing certain, all teachers should have a fixed method, must not only know their established method, but must acquaint the student with it. Method is necessary for harmony as well as thoroughness, and saves time and unnecessary repetition.

There is no best method, but several good methods. The method that brings best results is best, and if the student and teacher alike know what is coming, how and when, results will be better, for the student learns best by adapting himself

and his study to his teacher's method. He can then intelligently follow him.

Regardless of any particular method a teacher may follow, whether it be lecturing, quizzing, recitation, or a combination of methods, an important and educational practice is to get the student to make a written outline, or scheme of the work he has passed over.

Frequent written examinations accomplish this, and it is an excellent practice for the student. If it teaches nothing else, it teaches the student to know or itemize just what he does know. He thus indexes his knowledge as he goes along, making it more useful and handy for future reference.

Another point about frequent written work, it is itself a means of stimulating personal research, and above all, it trains the student to think. On points he hasn't firmly fixed, or doesn't thoroughly understand, he will read up authority on that point. Encouraging reference-reading helps the student then, and also forms a foundation for future useful work when he is out of school.

Adherence to Subject: Many teachers think that the students want to be amused or entertained, and indulge quite freely in "smutty" or funny jokes that compare favorably with some low-classed vaudeville; also poetical elocution and exploitation of irrelevant experiences, etc. Students, especially he who makes his own way by hard efforts and personal sacrifices, does not wish this from his teacher. He spends his money for medical education, and the more he gets, the better he likes it.

Again, extemporaneous, rhetorical flourishes on pet subjects to which the teacher may be partially fond, or religion, politics, temperance, and such like topics are quite out of place.

These will not meet with approval in a class the students of mixed tastes, most of whom are not interested in that particular direction or subject. Such diversion also breaks the trend of thought, or arouses foreign thought in the student's mind that will cause him to lose much of the lecture or lesson. This sort of a teacher is necessarily only in favor with the superficial student who attends school more as a pastime. The applauding of these jocular "jibs" is merely a mockery, and the sound, earnest student receives them with silent, solemn contempt.

Punctuality counts for much in a teacher. The teacher is too apt to forget that when he fails in his appointment that he not only disappoints one, but several.

If his class numbers 200, and he fails to "fill" his hour, there are 200 hours lost, each student losing one. The better the teacher, the more the loss. It is not, however, the good teacher who absents himself the most, but rather the

indifferent one. The best teachers who put their heart and soul in the work seldom miss an appointment, and when they must, it grieves them. There is usually a way around most obstacles in keeping appointments if the teacher is so inclined. One teacher I knew, who was otherwise an admirable teacher, held his class appointments secondary to his own affairs, and this practice proved detrimental to his success. Nothing creates so much turmoil and dissatisfaction in a class as the teacher's irregularity and absence. Then, too, the students tend to become careless and irregular in attending class hours of the teacher whose presence is always doubtful. The practice, or rather the lack of punctuality, which is deplorable, is more or less contagious, and many of the students get sluggish in their attendance to this kind of teacher, and later perhaps to others. Thus grows a vicious habit which may cause the student's failure in the end.

Contact and Personal Acquaintance With the Class: We may learn much of strangers, but we love most to quote and remember the sayings and wisdom of those whom we have been privileged to call our friends. Most all successful teachers become personally acquainted with their students. The distant, proud sort, who holds himself aloof from his class finds, if the truth were known to him, that his thunder passes over the students' heads as in the clouds of summer.

The teacher should recognize the peculiarities of each student. He should be able to call him by name, and look into his hopeful face and study his innermost self. This teacher will know how best to make the student imbibe his teachings through his very pores rather than to have his knowledge rudely thrust or dashed upon him to rebound, and be lost in the air.

There is much difference in students, and to teach them logically, the teacher must know the characteristic of each. This point is recognized in all forms of Pedagogy from the Primer Class on upward. Each class contains some timid, others bold and forward, as well as the many other different traits that pervade, and make all men a trifle different. Even in the teaching and training of the lower animals, the trainer continually notices and studies peculiar characteristics of each, and often to great advantage.

The successful teacher comes in contact and mingles more or less with his class, for to love the class it is necessary to know them.

The teacher who dislikes a class, or the class the teacher, soon causes discord, and little is accomplished.

By personal acquaintance with the individuals, the teacher can the better encourage his class and the individual members of it. Often there are members of the class who work hard, and seem to get along poorly, and it is hard to tell

just why oftentimes; but if the teacher gets close to the lagging student and gives him proper encouragement, and his courage and efforts are stimulated by a word of good cheer, sooner or later this student will be working with better effect. A well-placed word of encouragement from the lips of an admired teacher goes far, very far with a crestfallen student.

Again, by class contact and acquaintance, the teacher soon learns to know the relative standing of each member of his class. He knows the weak ones long before examination day, and it may be, by special efforts, and a little personal attention he may save this or that student who otherwise is doomed to fail.

Some students fail to acquire the requisite amount of knowledge through no fault of their own, and with a proper lift will eventually come up if they are known and taken in time by the conscientious teacher.

The old days of standing before several hundred students and lecturing is not practical for results, and is about to give way to sectional teaching. A teacher may interest or entertain a large hall full of students, but he cannot thoroughly instruct them. One of the greatest advantages of teaching in small sections is getting immediately in touch with each student, and it does not require much extra time or exertion to become acquainted with a class. After all, it is not the time spent in the class room that the teacher feels most, but the time it requires in preparation for the class-room. This time and preparation the teacher owes the class, and though he could give an interesting impromptu talk on his subject every day, still how much better discourse can he give by systematic preparation?

It is hard to give this time up indeed, for the teacher thus robs himself of pleasant hours with his family or friends, social functions, and even of some practice.

It requires time to look up these various new points of the different authors on his particular subject, yet it is imperative to do so. It is well and good to be so eminent as to be your own authority, but if the teacher follows no text book, he should certainly have at least a definite outline.

Even though a teacher has repeatedly taught a certain topic, time changes everything, and the old and young teacher alike must freely consult the latter authorities for the newest and best.

Medical teachers as a rule never receive remuneration commensurate with the time and labor they should spend in preparation and teaching. There are some, of course, who are the exception, and are dear at any price.

This paper has no space for the unqualified person filling the responsible position of teacher,

who gets his place by favor or "pull," and not by merit; and who holds this position without success or credit through the means he originally obtained it. Most schools are infested by a few of this class to its detriment.

If the students were consulted, there would be none of these in a school, but the students have no "say" in the matter, and their voice goes unheard when the wail of dissatisfaction goes up from the student body.

Another class or species of teachers which is peculiar to the medical college; that is, the teacher with "an ax to grind," who labors sufficiently to gain prestige with the class for future favor and business, and who cares little about imparting knowledge to the class, but rather confines his efforts to impressing the class with his own skill and knowledge.

This particular kind often gain the ruling hand in a faculty, and keep down the good teachers by their unfair tactics to the detriment of the school and profession as well.

One notable example of this is related in connection with a faculty squabble in Philadelphia. A man more in favor was given preference and place over one who was and is easily his superior as teacher, surgeon and author, and the students of that college have been incalculable losers ever since.

The mode of selection of the teachers and instructors of the various subjects in most medical schools is the cause of this.

The method of selection is all wrong, and often incompetent favorites are given precedence over teachers who could and would handle the branch properly.

In our common schools and high schools, you cannot find a teacher who is elected on simple application. He is first given an examination, and graded according to ability and knowledge.

It seems that all that is required of a medical teacher is to be a practitioner of medicine, and even in some instances that is not required.

Could every college graduate of a literary school immediately turn round and teach with success in the school from which he has just graduated? Certainly not, for some barely get through, and to be a good teacher, one must first have been a good student.

Another fault of a medical teacher that is not considered, and should not be passed too lightly, and that is his morality and sobriety.

The teacher should be a model for his students to imitate, but what say you of a medical teacher coming to class deeply in his "cups?"

There is no way of overcoming these faults in our present medical school system, but were the choice of teacher left to those who pay for their support—the student—it would be at least an improvement over now. Or had each college

a responsible and qualified person or persons to examine into each applicant's qualification and ability, and rank him accordingly, our teachers would then be far better. Also this same careful watchfulness and scrutiny should be maintained over each teacher's work, and when he fails to come up to the standard requirements "oust" him, and get some one who can and will come up to the standard.

The method usually in vogue now is to have a "dummy" board of trustees or directors who are merely figure-heads, and appoint whoever they are asked to, often without looking into appointee's merits and qualification.

Once in, the teacher takes his position and rank with the qualified, meritorious ones, and remains to fill perhaps an important chair or sub-chair with anything but credit to the college. The success and reputation of a college is no more than that reflected from her teachers, and the more shining lights in a faculty, the brighter will be that college's career.

In conclusion, let us all unite for the maintenance of a high standard of the teacher in all medical schools, especially ours here at home. Thus we may take pleasure in being able to point with pride to a school of merit, filled with active, able teachers. Then also will our fresh graduates be qualified to stand the test with those of any school or section.

We have always held up our head pretty well in the various State boards, and other competitive examinations, and it appears that we are progressively improving.

May we not hope and expect of our schools in the near future, the very best?

Our several faculties have gotten along nicely in the past at a distance, they having felt that too intimate association would not do, and held firmly to the fancy that two or more mixed families under the same roof have little chance of remaining good friends.

The better qualified, progressive class of teachers have been in sympathy with consolidation for some time, but the others, those of doubtful ability, have looked at it from his old selfish standpoint.

I wish to reiterate that we have sufficient good teachers for not over two good schools that will be a vast improvement over five from an educational point of view, and also feel that we could have one grand school if all would unite, and put a shoulder to the wheel and push together.

DISCUSSION.

J. G. Cecil: I think I speak the voice of the society when I say that we all enjoyed this paper of Dr. Casper's. I do not know exactly how I can discuss it to any special advantage. I might say, however, that for probably seven months in

the year every year for many years past I have indulged the fond delusion and hope that I might become a teacher, but that hope has invariably been dashed when I have read over the examination papers of my students. I am satisfied if medical teachings were based upon the plans and outlines suggested by the essayist that there certainly would be a great deal of improvement and there certainly is great room for improvement. Just how it can be brought about is another question. We can have our ideals, but it is a difficult problem when we come to put them into practice. The more I see of medical teaching as it exists in this city, and more or less in all cities with which I am acquainted, the more I am satisfied that there will have to be a decided change from that which has existed in the past. I believe that sooner or later we shall have to teach more or less by personal contact with our students. The essayist has well said that the day of standing before a group of three or four hundred students and lecturing, hoping to impart knowledge to them sufficient to practice has past. I am certain that some of the best teaching in the colleges is now done by what is known as "section" system, that is the classes are divided up into small groups of not more than five or six men in a group and put under the care of a teacher who is competent to teach them and in that way he comes in personal contact with them and imparts something of his own personality to them. I do not believe it is possible to stand before a group of one hundred men and lecture to them so that they will all be benefited and helped by the lecture. To-day we are in possession of the most excellent textbooks; we have everything that is known collected for us and arranged in admirable order so that I believe sooner or later we will have to get down to the assignment of lessons and recitations when it comes to the instruction of students in practice.

In order to teach medicine successfully we should have laboratories and we should have clinics. I am satisfied that what we need more to-day in the schools of the West, and in Louisville particularly, is well equipped laboratories where the students can be divided into small classes where the practical branches can be taught without undertaking to lecture to large classes. The student must come in direct contact with the teacher. This leads me to emphasize some of the points made by the essayist in this respect. He said nothing truer to my mind than that teachers, like roots, are born and not made. There is a personal magnetism about a teacher that makes him a teacher. He must, of course, possess other qualities besides, but you cannot fill a man full of knowledge and make a teacher of him in that way. There must be something about that man—something attractive

that allows him to impart this knowledge to the student. I believe this is born in the man. Another point is that a man to be a teacher—a successful teacher—must be a man thoroughly grounded in his subject. It goes without saying and without any necessary argument at all that a man cannot teach who does not know. Therefore, any man who undertakes to teach must properly equip himself for that object. So, then, our teachers must be well educated men and must be thoroughly educated in the particular branch that they attempt to teach. One other point made by the essayist, and a good one, I do not know that it was made in these words, that is that the man who undertakes to teach should feel a personal responsibility in teaching. Without that he will make a failure. I think that a man in the first place must have magnetism; he must possess a knowledge of his branch to enable him to impart that knowledge, and he must feel his responsibility.

I thank Dr. Casper very much for the essay, and I believe with my friend over here that it is one that it would be well for us to get before the public in some way.

W. H. Wathen: The essayist and Dr. Cecil have covered the ground so thoroughly that I have little to say, and I will not refer to the general qualities of the teacher further than this, that he must thoroughly know and understand his subject from every standpoint, and that he must not only be able to impart the knowledge to the student, but he must be able to teach that student how to reason correctly and how to use that knowledge. One man may possess a great deal of knowledge and be of very little use as a practical man while another man with little knowledge may aptly apply it and become a very useful man. What I want to speak of is the condition in Louisville. I have been striving for many years for a higher standard in this city. I want the Louisville medical colleges to come under the law as I want every school in this country and I have done my part in bringing about these successful results. Now, in Louisville we have consolidated five schools into three. Now, under the law the student is admitted to school after certain educational preparation. The State Board makes the rules under which he lives for four years and examines that student after he graduates. Therefore, we are compelled to do better work and in doing better work we must unite and have fewer colleges. The old adage is true that "you cannot make a silk purse out of a sow's ear." Therefore, in Louisville in the past we have been compelled to admit students to the schools not fit to study medicine, now in the future, beginning with last year we do not admit the students; the State Board examines the applicant and presents him a certificate. We have better material and we

are doing better work and the results will be better. While it will take two or three years longer to get out this old material that has accumulated upon us, within three or four years the schools of Kentucky will take rank with the schools of any State and we will find that instead of many of our students falling before the State boards of this country, our students will pass with credit before the boards of any State. I feel proud of what we are doing to-day. I do not speak of my own school. I speak of all the schools. They are all going to do better work for the laws have compelled us to do better work.

August Schachner: In some of the States the same conditions existed that exist here until a number of schools concluded to get together and in doing that they are going to better the students and the public indirectly. There is one question that came up that might arise here in Louisville and that is which man shall have this particular place and which man that particular place, and I was interested in the manner in which the matter was settled in some of these cities. The man who explained it to me called it the German idea. For instance four schools unite and make one school and amalgamate those four faculties. There are four men on surgery and four on practice. Now, they would say to the students after a given time, say a month or six weeks, you can decide which of these four men you are going to take surgery from, which one you are going to take practice from, and which one you are going to take materia medica from. Now, then the jackpot is divided up in proportion to the assistants that that man has. By leaving this matter to the judgment of the students they will select the man who delivers the goods. You can see the fairness of it all and I thought it interesting to bring it out here because of the confusion of consolidation. In conclusion, while I am aware that this is in violation of the rule of the society, I was sorry that the society did not rise above its rule in this case because this is a paper that stands for higher education and cannot but benefit all of us and should be published in the lay press.

Louis Frank: I just want to say a word or two. I am glad that the society did not see fit to publish this paper in the lay press. I do not think this paper represents the idea of medical teaching to-day. We have had a paper that discusses medical teaching from didactic lectures. I think the essayist failed to grasp the whole essence of medical teaching to-day. I do not believe that the best medical teacher is born at all. I believe the best teachers can be made and it generally requires ten, fifteen or thirty years to make them. I do not believe it is necessary for any medical teacher to go before a class and deliver a lecture on any subject and I believe that

the essayist lost the distinct trend of modern education. Medicine should be taught in the laboratory and in the hospital with a few bedsides assigned to the student. In the leading universities, Johns Hopkins for instance, the professor in anatomy never delivers a lecture on anatomy to the students. Professor Kelley never delivers didactic lectures in his teaching. The teaching is done with the students and the patient, and this is the teaching to-day.

As to what Dr. Schachner stated, I am familiar with the methods of teaching in other States. If that idea was carried out in this country and the teacher put on a salary of eight, ten or fifteen hundred marks a year or its equivalent in this country it does not mean that the man teaching is the best teacher at all. He may have better men under him who are doing the work with the students. It does not mean that the man who knows the most gets the largest classes notwithstanding what has been said here to-night. I do not believe with Dr. Casper that the student is a judge of a teacher. The student knows less than anybody. I believe it is best for the Board of Governors to select the teachers and not the students. The student does not know anything about medical education. The students we get here are too green to trust the selection of a professor to them.

Again I say I am glad it was decided not to publish the paper in the lay press because it represents a teaching that is entirely obsolete and out of date.

M. Casper: I thank the gentlemen very kindly for their discussion. I have but a few words to say. I believe that Dr. Frank misunderstood my paper. I did not advocate didactic teaching. You cannot teach surgery except by demonstration. You cannot teach without the use of the laboratory. I am not in favor of didactic lectures. I do not approve of that at all. I do not believe in having a number of students asleep, some of them thinking of their sweethearts miles away. I am in favor of sectional teaching entirely. Having a small group of men in a hospital they can see the operation or if it is a medical case they can examine the patient. A professor cannot take two subjects and present them alike. It depends upon the man's individuality and upon the subject itself, and Dr. Frank, if he sees the meaning of the paper, will be in favor of it. I had modern work in mind in writing this paper. I think, as he says, that the Board of Governors would be better able to select the professors than the students. I believe it would be an improvement over the present if we had some responsible person to criticize the teacher at his work and see if he comes up to the standard. Dr. Schachner's method is hardly like the one I described, but I believe with him that the student will come to the professor that "de-

livers the goods." The student goes to school to learn medicine. The more he learns the better he will like his teacher.

The Jefferson County Medical Library.

The Library Committee of the Jefferson County Medical Society desire to announce the opening of the Jefferson County Medical Library on October 1st.

The only feature of the library that will be in operation at its opening, will be that which pertains to current medical literature.

The library has now on file the best American, English, and German journals with others to be added.

The committee expects to have the library in full operation within a month or six weeks.

The committee desires to extend a hearty welcome to any graduate of medicine whether resident of Jefferson County or otherwise, and at the same time solicits any donations of books that any member of the profession may desire to present.

Respectfully,

LIBRARY COMMITTEE, JEFFERSON COUNTY MEDICAL SOCIETY.

Jessamine:—The Jessamine County Medical Society met at the office of J. S. Barnes, Nicholasville, September 19th, at 8 P. M., with T. R. Welch in the chair. The following members were present:—T. R. Welch, Fish, Barnes, Mathews, Penick, Pearson, and VanArsdall. The minutes of the last meeting were read and adopted. T. B. Pearson reported an interesting case of Impetigo Contagiosa in a child 14 months of age; the eruption was characteristic on the face and hands, no itching and the constitutional symptoms were very slight. T. R. Welch read a paper on "Some Observations on the Pulse as an Indication of Blood Pressure." The author gave the construction of the blood vessels and heart. He then stated the following axioms, "There can be no disease where there is a perfect circulation." "Where there is pain there is pressure on the nerve or a limited blood supply to the part." The author believes that arteries grow old on account of exhaustion of the blood vessel due to salt impoverishment or vitiated blood supply. The Sphygmomanometer has been of material aid to him in the early diagnosis of arteriosclerosis. The treatment as outlined is largely prophylactic, strict attention to the diet and hygiene, keep the emunctories active and supply the salts that are deficient in the blood. The paper was much complimented. T. B. Pearson led the discussion and concurred with the author in the diagnosis and treatment of arteriosclerosis. W. H. Mathews believes that it is a nervous condition and is one incident to old age, he is not fully satisfied

whether it may be primary or secondary. W. H. Fish concurred with the author in that it is due to the condition of the circulatory system. D. A. Penick thinks that it may be due to the condition of the intrinsic ganglia. J. S. Barnes concurred with the author in that it is due to a vitiated blood supply. The secretary believed with the author that the treatment in these cases is prophylactic. At the close of the Discussion T. R. Welch demonstrated the use of the Sphygmomanometer. On motion the October meeting will be devoted to post graduate work and subject to be discussed at this meeting are, Scarlet Fever and Measles, the chairman to be authority and to act as quiz master. The society adjourned to meet at the office of D. A. Penick October 24th, at 8 P. M.

J. A. VANARSDALL, Secretary.

McLean—In answer to a call of President Griffith and Councilor Ellis the following physicians met at Calhoun August 6th, for the purpose of reorganizing a County Medical Society. H. W. Gates, Haynes, Bandy, Ayer, Brown, Fitzhugh were present. After interesting talks by J. W. Ellis and Griffith on the importance of organization, the society proceeded to organize.

On motion Alf. Ayer, of Glenville, was put in nomination for president and was unanimously elected; J. H. Harrison, of Livermore, was re-elected secretary.

On motion the society adjourned to meet at Calhoun, August 16, 1907.

J. H. FITZHUGH, Secretary Pro Tem.

McLean County—Pursuant to a call of President Griffith and Referee Ellis, a number of the physicians of McLean County met them at Calhoun August 6th, 1907, and organized the McLean County Medical Society. After very interesting and instructive talks by President Griffith and Referee Ellis, it was suggested that Referee Ellis act as chairman pro tem., and J. S. Fitzhugh act as secretary pro tem. The election of officers was then taken up and the following officers were duly elected:—A. F. Ayer, Glenville, president; H. W. Gates, Calhoun, vice-president; C. E. Bandy, Rumsey, treasurer; J. H. Harrison, Livermore, secretary; J. H. Thorpe, was elected delegate to the State Convention. O. V. Brown, of Island, and R. L. Ford, of Livermore, were appointed to report cases for discussion at the next meeting, Sept. 16, 1907. The following physicians were present and joined the State Medical Society: W. L. Hynes, Calhoun; H. W. Gates, Calhoun; O. V. Brown, Island; C. E. Bondy, Rumsey; A. F. Ayer, Glenville; J. S. Fitzhugh, Island.

After the organization and the expression on the part of each physician that he had enjoyed the meeting and felt benefited, the society adjourned, to meet at Calhoun, Sept. 16, 1907.

J. S. FITZHUGH, Secretary pro tem.

McLean—The McLean County Medical Society met at Calhoun Sept. 16, 1907, with the following members present:—Gates, Haynes, Bandy, Thorp, Fitzhugh, Brown, Beard, Ayer, and Harrison. H. J. Beard read a very interesting paper on "The Care of Lying-in Women in Country Practice." The paper was thoroughly discussed by H. W. Gates, Thorp, and Haynes. J. S. Fitzhugh, of Island, made a talk on "Anesthetics, in Organic Heart Disease and Pulmonary Tuberculosis." After a discussion by all members present, A. F. Ayer, president, called on the society for discussion of the much talked of tablet of hyoscin morphine cactin, stating that he had used same as a general anesthetic with flattering results. J. H. Thorp related his experience with the tablet in six cases of labor in which almost complete anesthesia was produced without harm to mother or babe. He had also used same in case of convulsions in a child 9 years old with splendid results. Dr. Thorp recommended it as one of the very best hypnotists as well as a splendid anesthetic. R. L. Ford not being present, J. H. Harrison read a paper by him (R. L. Ford) on "The Importance of Correct Diagnosis." Dr. Ford's paper created a good deal of comment and all members entered into a lengthy discussion of same. H. W. Gates declared that the country doctor was a much better diagnostician than his city brother, notwithstanding the city physician's advantages over the country doctor. On motion the society adjourned to meet at Calhoun on the second Monday in November, 1907.

J. H. HARRISON, Secretary.

Marshall—The Marshall County Medical Society met in Benton in the office of Stilley and Jones to-day, (Sept. 11th.) with the following members present: T. C. Coleman, J. A. Jones, E. G. Thomas, V. A. Stilley, H. T. Carter, L. E. Jones, Robt. C. Overby, H. M. Robertson, T. B. Helm, and A. J. Bean.

The house was called to order by the president. W. T. Little's application for membership was considered; rules were suspended and he was elected a member of this society and L. R. Pace was elected an honorary member. After which the regular program was taken up. F. C. Coffield's paper on "Pneumonia," was first, he being absent, Robt. Overby was heard on "Malarial Fever." His paper was an excellent one and well discussed by the members.

Jno. A. Jones' paper was next heard, subject: "The Practice of Medicine Forty Years Ago." The paper was a good one, well prepared and was interesting to all.

It was agreed upon by the Society to meet once a month instead of every three months.

After transacting some business of minor importance the Society adjourned to meet October 9th, 1907.

A. J. BEAN, Secretary.

Washington—The Washington County Medical Society met at 10 o'clock A. M., August 12th, in their room at the court house. The following were present:—J. H. Peak, Louisville; R. C. McChord, Lebanon; W. W. and M. W. Hyatt, J. B. Robards, J. C. Mudd, W. R. Thompson, D. A. Crosby, W. W. Ray, J. N. Shehan, S. J. Smock, A. G. Beam, and J. H. Hopper. The meeting was called to order by President J. N. Shehan. After the reading of the minutes W. W. Hyatt presented a clinical case, which was pronounced Squamous Eczema, covering almost the entire surface. The face was not involved. Scales were very numerous, and when removed left a dry, red surface. A number of physicians had seen the condition on a portion of the body, but none had ever seen it on such a great surface. The treatment suggested was along lines of elimination, too great a surface involved for strong local applications. The diet was to be regulated. A few other cases of little importance were presented.

W. O. Humphrey, of Louisville, who was to read a paper on "Intestinal Obstruction," and F. L. Koontz, of Louisville, whose subject was "The Use of the Colon Tube," were unable to be present. J. H. Peak kindly consented to take up the subject of "Intestinal Obstruction," which subject he handled in a very pleasing manner. He gave as some of the causes, chronic constipation, enteroliths, volvulus, bands of adhesions, gall stones, stating that no gall stone large enough to cause obstruction could pass the bile duct, however, under certain conditions, as adhesions of bowel and gall bladder, a large stone might rupture into the intestine and cause obstruction. Also a number of small stones mixed with bowel contents might obstruct. He also stated that sometimes after operations and the administration of an anesthetic we had a condition simulating obstruction caused by paresis of bowels. He divided these cases as follows:—Acute and chronic, complete and incomplete. He gave the symptoms and advised a thorough trial of colon tube, etc., before resorting to surgical means. Purgatives to be avoided, as a rule, after diagnosis was made.

R. C. McChord led the discussion, bringing out some points regarding the time for operation. He

also called to mind a case of paresis of intestine after operation where he was able to force water and oil through the intestines and out the mouth. Dr. Ray seemed to want to doubt Dr. McChord's assertion (jokingly), whereupon Dr. McChord stated that he had done this in the presence of a number of Lebanon physicians. The point Dr. McChord made was that in cases of paresis water could be forced past the ileocecal valve. The secretary reported a case of obstruction which occurred in a brother physician's wife. The patient was habitually constipated, finally having total obstruction. Considerable inflammation was present when first seen. A good sized tumor was very readily found. After the persistent use of colon tube for 24 or 36 hours. R. C. McChord, Shehan, Robards, and Hyatt saw the case. They advised measures to allay inflammation before operation. She seemed to do better for 48 hours, but took rapidly worse. Pulse were 150 to 160 per minute. Patient in semi-conscious condition. It looked as though she could last but a short while, and the consulting physicians said try croton oil as a last resort. Some fecal matter and much gas resulted. Pulse came down to 120, consciousness returned; continued use of colon tube and gave calomel with some results, but in 48 hours general peritonitis set up and patient died. After some discussion, and thanks to Drs. Peak and McChord society adjourned.

J. H. HOPPER, Secretary.

Wolfe—At a meeting of the Wolfe County Medical Society September 2, we had present with us I. A. Shirley, and Leming, at which meeting some very important steps were taken, one of which was to appoint a committee on fee bills, to raise the minimum to a higher standard, to report at our next meeting, which will be held Oct. 7, 1907, and the following new members were admitted to our county society:—C. H. Williams, Hazelgreen; Taylor Center, Hazelgreen; R. A. Byrd, Gosneyville; D. H. Kash, Landsaw; J. H. Dunn, Lee City. It was a very enthusiastic meeting, from which I am sure great good will be accomplished, especially for the doctors of Wolfe County.

JOHN L. COX, Secretary.

Hay-Fever,—Autumnal Catarrh.—By W. F. Owsley, Burkesville.

An affection of the upper air-passages, often associated with asthmatic attacks, due to the action of certain stimuli upon a hypersensitive mucous membrane.

This affection was first described in 1819. Wyman of Cambridge, Mass., describes two forms,

the "June cold" or "rose cold," which comes on in the spring, and the autumnal form which, in this country, does not develop until August and September, and never persists after a severe frost. Until recently this form of catarrh was believed to result exclusively from the action of certain irritants on the mucous membrane of the nose, particularly the pollen of plants, which, as the experiments of Blakeley showed, play an important role in the disease. Other things may induce an attack, as in the case of the late Austin-Flint, who was liable to coryza, or even asthma, if he slept on a certain sort of feather pillow. This, however, is only one factor in the disease. A second, most important one, was discovered in the condition of the nasal mucous membrane in these cases. It has been discovered that in a large number of the cases of hay-asthma there was local disease of the mucous membrane of the nose, the cure of which rendered the patient non-susceptible to conditions previously exciting the attacks. This has been abundantly confirmed. Still identical lesions exist in many people who never suffer with the disease, so that there must be a third factor, a neurotic constitution. In the etiology of hay fever these three elements prevail, a nervous constitution, an irritable nasal mucosa, and the stimulus. The disease affects certain families, particularly, it is said, those with a neurotic taint. The peculiarity may occur through several generations. These are, in a majority of the cases, very like those of ordinary coryza, there may be much more headache, and distress, and in some patients they will get very low spirited, cough is a common symptom and may be very distressing, paroxysms of asthma may develop, so like as to be indistinguishable from the ordinary bronchial form; the two conditions may indeed alternate, the patient having at one time an attack of common hay-fever, and at another, under similar circumstances, an attack of bronchial asthma. Of the immediate exciting causes of the attack, unquestionably in a majority of the cases coming on in the autumn there is an association with the presence of pollen in the atmosphere, but this is only one of a host of exciting causes. In certain persons the paroxysms may develop at any season from sudden change in the temperature, an attack may even come on through association of ideas.

Treatment: This may be comprised under three heads, first, since the disease appears in many instances to be a form of chronic neurosis, remedies which improve the stability of the nervous system may be employed, such as arsenic, phosphorus, and strychnine; second, climatic, dwellers in the cities of Atlantic seaboard, and of the Central States enjoy complete immunity in the Adirondacks and White mount-

* Read before the Cumberland County Medical Society, August, 1907.

ains. As a rule the disease is aggravated by residence in agricultural districts, the dry mountain air is unquestionably the best; there are cases, however, which do well at the seaside; third, the thorough local treatment of the nose, particularly the destruction of the vessels, and sinuses over the sensitive areas.

Clinton—The last meeting of the Clinton County Medical Society was on July 23. The regular program was carried out and the society seemed very enthusiastic. Our society is doing better work than ever before. I am now going to report two new members as a result of our last meeting. A. P. Ryan, an old practitioner, and N. B. Flowers, a recent graduate were both elected to membership in our society in the regular way of election. This only leaves one non-member in our county.

F. W. HUDDLESTON, Secretary.

Cumberland—The Cumberland County Medical Society met in the court house at 10 A. M. July 24, 1907. The following were present:—Albert Sharp, H. L. Cartwright, W. C. Keen, Oscar Keen, R. L. Richardson. The previous minutes, read and approved. Albert Sharp reported a case of tape-worm in a little child 1 1-2 years old, was called to see child and gave calomel and santolin and on next day child commenced to expel tape-worm. He had sample of tape-worm before the society. On being called back to see child he put it on a preparation put up by Parke, Davis & Co., with good results. It was a very interesting case, and was discussed by all present. H. L. Cartwright said:—"The specimen before us is interesting because of the different sources from which it may be produced. *Tenia solium* obtained from eating uncooked pork or (measly pork), also from beef unduly cooked. The worms from this source are called *tenia saginata*. This specimen seems to me to be the *tenia solium* or pork *tenia*. When their ovum or embryo are carried by circulation and caught up in liver and kidneys they become echinococcus or hydated cyst. This gives the surgeons no little trouble."

W. C. Keen reported a case of a lady who had given birth to a child; everything seems to be all right until baby was four weeks old. She was sitting up, turned sick, and vomited about 1 pint of pus, fever on next day, which was Sunday was 100, Monday 102, Monday night 105. Temperature ranging from 100 to 105, not regular. Bowels not sore, but could not control them. Stomach not enlarged, liver not enlarged, pus passed through bowels, husband was a physician, said he knew it was pus she vomited and passed

through bowels, and knew her previous health had been very good. She died.

Cumberland County Medical Society met in court house at 10 A. M. on August 28th, 1907. Following members present:—H. L. Cartwright, W. F. Owsley, W. C. Keen, R. L. Richardson. As our president was not present we called H. L. Cartwright to the chair. Minutes of last meeting read and adopted. W. F. Owsley read a paper on "Hay Fever," which was very interesting and discussed by all physicians present. W. C. Keen reported a case of carbuncle, 9 1-2 by 6 1-2 inches. W. C. Keen emphasized the importance of diagnosing a case of carbuncle early in the disease, and asked what would you do? Each physician responded with the answer, "cut it out."

Our next program will be as follows:—A paper by W. C. Keen; a paper by Oscar Keen; W. F. Owsley to report a case; H. L. Cartwright to report a case.

ROBERT L. RICHARDSON, Secretary.

Anderson—Minutes of Anderson County Medical Society, October. The meeting was held at the office of Dr. Paynter, and called to order by the president, Dr. Pindar. Those present were:—E. O. Pindar, Gilbert, Lillard, Toll, Kavanaugh, Paynter, Murdock, Leathers, and Albright, formerly of Knox county, who was welcomed into the society as a member, having located in Lawrenceburg. J. O. Murdock had a thorough paper on "Diphtheria," going minutely into the discussion of the most important points. He called attention to the fact that some still regard diphtheria as a constitutional trouble with local manifestations, but not to confuse this with the fact that diphtheria often occurs simultaneously with some other morbid process. The strong point in prophylaxis was to treat all suspicious throat trouble as diphtheria, as malignant cases may arise from a mild one. In treatment, the vigorous but careful use of local applications in the form of mild germicides, close attention to the enfeebled heart with whiskey and strychnia, and of course the earliest possible administration of large doses of antitoxin.

G. D. Lillard was down for the discussion of the paper, and complimented it highly. He called attention to one point of interest, that we often confound the two diseases, follicular tonsillitis, and diphtheria. He relies on large doses of antitoxin and whiskey as a stimulant. Does not believe that antitoxin is much good as a prophylactic in small doses.

C. M. Paynter: Every case I have seen has had regurgitation through the nose of fluids which they have attempted to swallow. Use antitoxin where there is any suspicion of diphthe-

ria. Use ammoniated tincture of guaiacum as gargle and internally.

C. A. Leathers: Made the point that it never was a good idea to bury the excreta, but to destroy it in some more effectual way.

J. C. Toll: Twenty years ago writers said that diphtheria was "most contagious"; ten years later they said it was very contagious, and now they speak of it as being mighty contagious. Lots of cases we don't call diphtheria are diphtheria. All local treatment harmful except mild wash. 500 units effective as prophylactic. Give large doses; one case reported where 52,000 units were given, with recovery.

G. H. Allbright: Remove the membrane in diphtheria, and in six hours it will be back. Ammoniated tincture of guaiac will not do any good in diphtheria.

C. W. Kavanaugh: Prophylactic doses have always been effective in my hands. Diphtheria, it must be remembered, is not a disease of the tonsils alone. Believes there is a difference between diphtheria and membranous croup, but they are so minute as to be of little diagnostic value. Nursing children seldom have diphtheria. Alkaline washes and antitoxin in large doses.

J. O. Murdock: Closed the discussion and said that he believed that the absolute diagnosis depended on the perfectly trained and experienced eye.

L. O. Pindar stated to the society that he had been selected health officer of Tyrone and asked any of the physicians to report to him such matters as should come under his notice.

A motion was made and passed that a permanent committee be appointed to attend to getting a hospital located at Lawrenceburg. This motion carried, and the following committee was appointed: — Pindar, Paynter, Kavanaugh, Leathers, Gilbert.

The society adjourned to meet with Dr. Lillard, on 4th day of November.

J. W. GILBERT, Secretary.

Barren—The Barren County Medical Society met October 8th, 1907, C. W. Froedge in the chair. A. T. Botts reported a case of typhoid fever of six weeks' standing, which is now free from fever, but in an atonic condition, without appetite or vigor, with bed sores and great lassitude. Tonics, fresh air, and stimulants recommended.

C. W. Froedge reported a case of globus hystericus in a plethoric woman of 22, married. Has one child a year old. Paroxysm passing off in two hours, leaving her in perfect health. Unable to find any pathological lesions.

J. M. Taylor reported a case supposed to be psoas abscess in a young man. Aspiration suggested.

The subject "The Relation Which Should Exist Between Physicians and Druggists," postponed last meeting, was introduced by J. M. Taylor in a pointed speech. He said: — "The druggists are in the habit of refilling physicians' prescriptions and recommending nostrum and patent medicines for the treatment of the laity, thereby making themselves local agents for the manufacturers of the patent and proprietary medicines. This fact is shown by circulars on the counters in drug stores with which the druggist wraps medicines and other packages purchased by the layman. There is enough money spent by the people for patent medicines, if paid to the doctor, to raise his income to \$2,000 a year instead of \$600, which it now is. We create confidence in the druggist on part of the layman by confiding in him ourselves, and recommending him.

"The remedy:—1st, agitation. Talk among ourselves and customers. Explain to the clergy. 2nd, qualify ourselves in materia medica and prescription writing. 3rd, demand as early as possible that the druggist handle only ethical preparations. 4th, handle our own drugs and do our own dispensing."

J. S. Leech said the wholesale and retail druggists' associations were trying to solve the problem, and to wait for the solution. The society as a whole thought the more and sooner it was discussed in our subordinate meetings, the sooner it would bring to bear on the national organizations, and the better we will be qualified to understand it.

Titus Orr read a ten minutes' paper which was to the point, neat and concise from the druggists' standpoint. The paper was well taken by the society. After arranging a program for November 12, the society adjourned.

By the way. I want to suggest that the various societies discuss this question jointly with your druggists, and you will see at once a tendency on the part of both physicians and druggists to practice cleaner and more scientific medicine.

R. S. PLUMLEE, Secretary.

Elliott—At a meeting called for that purpose by Jas. H. Harper, a medical society was organized in Elliott county to be known as the Elliott County Medical Society and meeting time and place to be the first Monday in each month at Sandy Hook. The following members were present and enrolled:—E. H. Maggard, Newfound-land; Jas. H. Harper, Gimlet; S. G. Hunter, Sandy Hook; J. L. Lyon, Fielden; J. C. Sparks, Sandy Hook. E. H. Maggard was made president of the organization and J. C. Sparks, of Sandy Hook, secretary. E. H. Maggard agreed to read a paper at our next meeting on "Treatment of Gonorrhoea;" Jas. H. Harper on

"How to Manage a Case of Obstetrics;" S. G. Hunter, on "Hysteria;" J. L. Lyon on "Bronchial Pneumonia;" J. C. Sparks on "Iritis."

Please find enclosed \$10.00 to pay for State Medical Journal for each of the above gentlemen, which you will please send at once to the above addresses. You will also enter us on your list of medical societies and send us full instructions how to proceed, as we are ignorant in the work. Hoping to hear from you soon,

J. C. SPARKS, Secretary.

Oldham—The Oldham County Medical Society met July 25th at the residence of C. N. Goldsborough, in LaGrange, John H. Speer presiding. There were in attendance John H. Speer, Lew G. Wallace, R. B. Cassady, W. C. Steedman, Alonzo M. Morrison, J. A. Freeman, C. N. Goldsborough, Elanor A. Harthill, and Herbert Caldwell. The morning session was devoted to business. A motion was made by Herbert Caldwell and seconded by John H. Speer, that "We discourage in every way possible the use of secret nostrums," which was unanimously adopted. Alonzo Morrison moved that "We accept nothing less than \$5.00 for examining fee for life insurance;" seconded by R. B. Cassaday; adopted. The society next took up the question of a hospital in Oldham County, and after considerable discussion R. B. Cassaday moved that a committee be appointed to suggest ways of furthering the building of a hospital in Oldham County; seconded by W. C. Steedman. The president appointed W. C. Steedman, Freeman, and Caldwell. The society then adjourned to dinner, a repast which was greatly enjoyed.

The afternoon session, there being no papers, was devoted to the discussion of cases. J. A. Freeman reported a most interesting case of appendicitis with operation, disclosing a condition of ruptured appendix and free pus in the abdominal cavity; patient living only a few hours after operation. In this case the temperature never exceeded 101.4°. C. N. Goldsborough reported a case of cerebral hemorrhage, in which, after many other remedies had been used, 2 doses of croton oil of 5 minims each caused enormous evacuations and great subsequent improvement in the patient. In discussing this case W. C. Steedman told of several cases in which the use of inunctions of mercurial ointment on the unparalyzed side had met with much success. At the close the society unanimously thanked Dr. Goldsborough and his wife for the hospitality which they had so generously extended to the members and all agreed that a most enjoyable and useful day had been spent. The meeting adjourned to meet September 26th, in LaGrange.

HERBERT CALDWELL, Secretary.

Scott—The profession in Scott County is in fairly good condition. The county society is a drag—barely living—I might say. Our meetings are quarterly, and attendance of about one-third on an average; nearly always those who are to furnish the papers are with the absentees.

Referring to malpractice suits, only one against doctors in this county for years, and that against Drs. Lewis and Coffman, in Federal Court at Covington. At request of defendants it was transferred to Frankfort, and at this time was continued until March term. Damage to amount of \$10,000 is alleged. I do not remember the exact facts in the case, but they are something like this:—A boy 15 years of age sustained a fracture just above the knee. Dr. C. dressed the fracture and looked after him for ten days, at end of which time the father of the boy, who lived in Covington decided to take him to his home in that place, against the wishes and consent of Dr. C. The boy was brought to the office of Drs. Lewis & Coffman and was pronounced by them in a favorable condition, but should not be removed, they said. But in spite of their advice, boy was taken to Covington. and subsequently it was reported had much shortening of the leg, and abscess near the knee-joint. It is not expected a judgment will be given against the doctors, but the expense will be considerable; attorneys' fees alone will probably reach one thousand dollars.

I regret very much my inability to be at the meeting this week. We are now having a very malignant type of diphtheria in a remote part of the country. L. F. Heath, alternate from this county, has, promised to be present.

Hoping I have not drawn this letter out too awfully long, I am,

JNO. E. PACK, Secretary.

Jackson—We the doctors of Jackson County met at the office of G. C. Goodman, Welchburg, the 11th of Oct., 1907, for the purpose of organizing a county medical society.

The meeting was called to order and objects explained by County Referee W. T. Amyx, after which N. M. Clark was elected president, W. T. Amyx, vice-president; J. M. Morris, secretary, and G. C. Goodman, treasurer.

A committee on resolutions was then appointed by the chair. A. T. Neal, G. C. Goodman, and W. T. Amyx. The committee reported the following resolution, which was unanimously adopted:

RESOLVED, 1. That we adopt the By-Laws as prescribed by the Kentucky State Medical Association.

2. That we adopt a uniform system of prices in Jackson County.

3. That the minimum fee of old line life insurance companies shall be \$5.00, and that we make no examination for less amount.

J. M. Morris was then elected a delegate to the Kentucky State Medical Association which convened in Louisville Oct. 17, 1907.

The meeting then adjourned to meet the first Wednesday in November, 1907, at Welchburg.

J. M. MORRIS, Secretary.

Warren—The regular meeting of the Warren County Medical Society was held in the Doctors' Club Room Wednesday, Sept. 28th, 1907, with W. C. Simmons in the chair. F. D. Cartwright opened the meeting with a paper on the "Etiology of Carcinoma," in which he gave all the recent views regarded the cause of this malignant disease. J. H. Blackburn, address on "Probability of Recurrence in Sarcoma and Carcinoma," was supplemented by diagrams illustrating the recurrence as a geometrical problem. A. T. McCormack spoke on "Benign Tumors of the Breast, Diagnosis and Treatment."

A special meeting of the post-graduate course was held in the Doctors' Club Room Saturday, October 19, 1907, with George H. Simmons, of Chicago, Secretary of the American Medical Association as the distinguished guest of honor. J. H. Blackburn opened the program with an address on "Gunshot Injuries of Head." Several specimens of brain injuries were shown, and several sheep's head with gunshot wounds served to demonstrate the speakers' subject. F. D. Cartwright spoke on "Intercranial Hemorrhages," and reported three interesting cases. L. H. South read a paper on Traumatic Meningitis, first giving the anatomy of the meninges, and demonstrated the injuries received in gunshot wounds with the specimens supplied by J. H. Blackburn.

W. H. McCracken exhibited slides from brain tissue with a magic lantern of his own device. The president called upon Dr. Simmons for his views and impressions of our post-graduate work. Dr. Simmons responded by complimenting the speakers, and said that we were doing a pioneer work and the success of this post-graduate course will influence the work in all the county societies, as it was from this society the post-graduate course emanated. After the meeting refreshments were served at the Morehead.

L. H. SOUTH, Secretary.

HYDATID CYSTS.

By EDWARD SPEIDEL.

REPORT OF 3 CASES WITH SPECIMENS.

Hydatid Cysts, also known as vesicular mole and Chorion epithelioma benignum, is a

condition in which the terminal extremities of the chorionic villi are converted into transparent vesicles filled with clear viscid fluid. The cysts vary in size from a millet seed to a grape and are intertwined on slender stalks so that the mass resembles very much a bunch of grapes.

The condition is supposed to be very rare, Peterson giving the frequency as 1 to 10,000, Edgar personally has seen 4 cases in 15,000 labors, Williams has had 3 in a large obstetrical practice extending over 5 years.

The writer has had the unusual experience of having three such cases in six months. The diagnosis of the condition is based principally upon the fact, that the uterus is larger than would be indicated by the period of gestation. In addition to this, the uterus has a doughy feel and no evidences of a foetus can be made out. There is an oozing of bloody fluid more or less profuse, extending over quite a period. Exceptionally, small cysts are discharged and then, of course the diagnosis is easy.

It is said to occur most frequently in multipara and the condition is said to be the most potent forerunner of deciduoma malignum.

Two of the three cases about to be reported, were primipara less than 20 years of age, the third a 2 para 26 years old.

First case Primipara 19 years of age, married in June, 1906. Last menses Aug. 3rd to 10th. On Oct. 20th she was frightened by an accident occurring in her presence and profuse uterine bleeding set in. This continued for 4 or 5 days, during which time she remained in bed. Thereafter slight oozing occurred every day, not increased by the upright position, continuing until she arrived in Louisville about Dec. 23rd. On Jan. 4th at 8 P. M., the case was turned over to me through the courtesy of Dr. Hendon who was treating a severe case of erysipelas at the time. An examination showed blood oozing from the vagina, but the cervix not dilated. Treatment for threatened abortion was instituted, elevation of the foot of the bed with opium suppositories. At midnight I was hurriedly called to the patient who was having expulsive pains. Upon vaginal examination a soft mass was felt emerging from the cervix and when this was finally expelled it was found to be a hydatid mole. The patient passed through an afebrile puerperium.

The second case a primipara about 20 years of age, married the middle of August, 1906, last menstruated August 28th to Sept. 2nd. At the end of October she fell in dancing and thereafter there was a daily slight

oozing of blood until December 15th, when I was first consulted. Examination at that time showed a uterus larger than the given period of gestation. In spite of recumbency and elevation of the bed, the slight oozing without bearing down pains and with no dilatation of the cervix, continued. About two weeks later Dr. Hendon was called in consultation. The uterus was about one inch above the umbilicus and as the patient was extremely desirous of having a child, it was concluded to hold out a little longer until the size of the uterus would indicate a viable child and premature labor could be induced. In the meantime, suspecting an abnormal condition, the nurse was instructed to watch for any cysts in the discharge and auscultation and palpation of the abdomen were practiced frequently with negative results.

On the 5th of January the patient having suffered from a profuse flow and having developed a haemic murmur, interruption of the gestation being demanded in the interest of the mother's life, the patient was taken to the Infirmary. The following morning under anesthesia, dilatation with steel dilators was begun, but after 45 minutes, the cervix was so rigid, that a single finger could not be inserted. The patient was doing so badly under the anesthetic, that it became necessary to stop further procedures. Two bougies and a vaginal tampon were quickly inserted and the patient returned to bed. In spite of severe pains, there was no progress in the case and after 36 hours she was anesthetised again and dilated with more success. The fingers inserted through the cervix could feel a firm structure extending across the uterus at the internal os. The fingers could make no impression on it, so a placental forceps was forced through it and the mass pulled out of the uterus piece meal. It was found to consist of masses of hydatid cysts that were firmly attached and no doubt to some extent had invaded the wall of the uterus. Dr. Hendon and I were kept busy for fully an hour emptying the uterus and finally were compelled to quit, as the patient's condition did not justify any further procedures. The patient left the infirmary apparently in good health after a protracted convalescence.

The third case was a two-para 26 years of age, seen June 5th in consultation with H. H. Grant. The patient was extremely nervous, was suffering from nausea and vomiting, had an exophthalmic goiter and when seen a temperature 100, pulse 135. The consultation was to determine the advisability of inducing a therapeutic abortion.

Upon bimanual examination, the cervix admitted the tip of the finger easily, fundus on a level with the umbilicus, uterus of a peculiar doughy consistency. No fetal heart sound could be heard, especially as the pulsations of the abdominal aorta at the rate of 135 a minute were loudly transmitted over the symphysis. According to the indefinite history of the patient, she was about four months advanced in gestation. On account of the patient's condition, it was deemed advisable to secure preliminary dilatation by the use of the bougie and vaginal tampon. After 36 hours, there was a sudden discharge of blood from the uterus, and H. H. Grant, who was present, succeeded in quickly emptying the uterus of a basin full of hydatid cysts, the second specimen exhibited.

CORRESPONDENCE.

AN LETTER BY BENJ. RUSH, 1910.*

By C. H. TODD, OWENSBORO.

I have a letter written 96 years ago by Dr. Rush, giving medical advice to a patient, which I think would be of interest to the society, and therefore ask permission to read it. I will first give a brief sketch of Dr. Rush, which will add to the interest of the letter.

Dr. Benjamin Rush, the Sydenham of America, was born in 1745 near Philadelphia, graduated in medicine in Edinburg in 1768, and after spending a year in the hospitals of London and Paris, located in Philadelphia in 1769, at the age of 24 years, taking the chair of chemistry in the new medical college organized that year.

He at once became a leading spirit in the political and social movements of the day. He was the secretary of the first anti-slavery society organized in America in 1774. He was a close friend of Benjamin Franklin, a member of Congress from the State of Pennsylvania in 1776, and one of those who signed the Declaration of Independence the same year. When the political crisis ended in 1787 with the convention for drawing up a Federal Constitution of which he was a member, he withdrew from public life, and gave himself up wholly to medical practice. In 1791, when the medical college, which he had helped to found, was absorbed by the University of Pennsylvania, he became the professor of the theory and practice of medicine in that institution. During the thirty years that he attended the Pennsylvania

* Read before the Daviess County Medical Society.

Hospital as visiting physician, he never missed his daily round, though he was a frail and delicate man:

Philadelphia, December 31st, 1810.

Dear Sir:—

A diseased liver generally brings the stomach into sympathy with it. It will be proper, therefore, to direct our remedies primarily to remove the cause of the distressing symptoms you have described in Mrs. B.'s stomach. The most powerful remedy for this purpose is calomel, a grain, or half a grain of which, should be taken three times a day, restrained, if necessary from purging by a small quantity of opium. This medicine should be continued until it touches her mouth, then laid aside until her mouth is well, and then resumed and laid aside two or three times while there is any reason to believe the obstruction in her liver continues to affect her. In the meanwhile, the distressing symptoms of her original disease as they appear in the stomach, should not be neglected. The remedies proper to relieve them should be palliative and radical. The former should be magnesia—the sal soda—a mixture of equal parts of lime water and milk, a tablespoonful of which should be taken at any time when she is troubled with acidity, puking, or sickness, every hour until she is relieved. From ten to twenty drops of laudanum taken just before she sits down to her meals will probably enable her both to retain and digest her food. Ginger tea often relieves all the uneasy symptoms of diseases of the stomach. A teaspoonful of the fine powder of charcoal taken daily is both a palliative and radical remedy in stomach complaints. The radical remedies should be solid food taken at short intervals and in small quantities, and with as little drink as can be patiently submitted to with it. It is a curious fact that food somewhat difficult of digestion often relieves a diseased stomach more than that which soon passes out of it. Let beef, mutton, wild fowls, venison, fish, oysters, salted meat, salted fish all be tried in succession and alternately, and but one at a time. Dry bread, or toasted bread, or biscuit should be taken with them, and no other matter of a vegetable nature. If all these articles of diet disagree with her, let her try rennet whey, well-boiled turnips or potatoes, and any or all of the different kinds of mush, and above any of them rice in all the different forms in which it is usually prepared for the table. Toast tea should be taken if agreeable to her, as her chief drink. Perhaps a little porter and water, or claret and water may not be offensive to her stom-

ach. To assist this diet, she should take some of the preparations of iron. Five grains of the rust of this metal mixed with five grains of ginger may be taken three times a day with her calomel. They will not interfere with its operation. If this be offensive to her stomach, try five grains of tar made into two or three pills with a little flour three times a day. If this medicine be not well received by the stomach, try the nitric acid diluted with water so as not to be unpleasant to the taste. The bowels should be kept gently open. The tincture of rhubarb will be the best medicine for this purpose.

Quiet exercise should be continued, but never to such a degree as to induce fatigue to the body or mind.

Have blisters been applied to her side? They are sometimes useful in diseases of the liver. Great care should be taken to guard her against taking cold by dresses suited to the changes of the weather.

With sincere wishes for the success of the above prescriptions, I am as ever,

Very respectfully yours,

BENJAMIN RUSSELL.

P. S.—My usual fee for a letter of advice is ten dollars.

GENITO-URINARY AND SKIN DISEASES.

ALOPECIA AREATA.

BY M. L. RAVITCH, LOUISVILLE.

In spite of the frequency with which Alopecia Areata is observed, its causation still remains a matter of uncertainty. Sabouraud's discovery of micro-organism appeared at first to decide the issue in favor of parasitic theory, but later observations have tended to question the occurrence of these in all cases and to suggest that even when present they are not responsible for the development of baldness.

Jonathan Hutchinson, the eminent English physician, continues to advocate his theory that Alopecia Areata is consecutively connected with ringworm and that the disease may develop many years after the attack of ringworm has been cured. He insists that Alopecia is parasitic in origin, though he allows that the parasite has not been discovered.

In spite of the fact that distinguished dermatologists have given the etiology of this disease considerable study, as yet there is no uniform view as to its cause. On the other hand, it has been frequently remarked that Alopecia is often associated with headache,

neuralgia and other signs of nerve disturbance, and recently Dr. Whitefield has suggested that reflex irritation resulting from eye strain may in certain cases be the immediate cause of the baldness. Dr. Whitefield disclaims the idea that he is advancing eye-strain as a universal or even a very frequent cause, but he quotes certain eye diseases which are remarkable, and which ought to be borne in mind by those who may be called upon to treat this often intractable disorder. A woman had a large bald patch on the vertex which has defied all forms of local treatment. Headache was a marked symptom. She had an error or refraction for which she had worn glasses after her eye had been examined and suitable lenses prescribed, the hair begun to grow and the affected area was thickly covered in six weeks time. Another patient had a patch of alopecia over her left ear. She had headache and well marked hypermetropia which was corrected by lenses. Her hair grew rapidly, but a year later the headache returned in the form of violent attacks and migraine, and another patch of baldness developed. Two students suffering from uncorrected myopia were cured of alopecia and severe headache by wearing suitable spectacles. Dr. Whitefield finds that, although in the majority of cases of alopecia eye strain has nothing to do with the disease, in a certain percentage, chiefly of adults suffering the nervous irritation consequent on an undue effort to focus fine objects seems to determine the onset of the symptoms in pupils whose health is not the most robust. The significance of his observations extend obviously to the general doctrine of the etiology of alopecia, and lend distinct support to those who insist that the disease is a tropho-neurosis.

There certainly are cases which arise in circumstances that suggest contagion, therefore parasitic influence in the strongest possible manner. On the other hand, there are many examples of the disease in which no such suggestion arises, and in which depressed general health, with other indications of defective nerve tone, indicate that alopecia is of neurotic origin. May it not be the case that in the two groups, though there is a similarity in appearance, there is a dissimilarity in the underlying cause.

STRICTURE OF THE MALE URETHRA.*

By E. O. SMITH, CINCINNATI, O.

Stricture of the urethra is an abnormal narrowing of some part of that channel

which interferes with the free outflow of urine, due to either muscular spasm or to organic changes in the walls of the urethra. It may be congenital or acquired, the great majority being of the latter variety.

Occasionally in the very young we meet a case where there is frequent micturition both day and night, with some dribbling of urine, which symptoms are attributed to habit or "meanness" by the parents. Even the physician, when consulted, makes light of it and in so doing he does the little patient a gross injustice, at least until he has satisfied himself that there is no stricture. The constriction in the very young is located most frequent at the external meatus, but may be in the posterior urethra and must be dilated, after which the disagreeable symptoms disappear. A certain amount of narrowing of the external meatus is normal and favors the projection of a strong stream of urine. Therefore the division of a narrow meatus must be done very carefully, or the patient will be left with no projectile force. Acquired strictures are divided into—spasmodic, congestive, and organic.

The spasmodic is either reflex or psychical, and is usually due to an irritable compressor or urethrae muscle. Among the causes are acid urine, cantharides, sexual excesses, fissure of the anus, hemorrhoids, pin-worms, etc. Particularly apt to occur in young men who are the counterpart of hysterical women. A case is reported where the symptoms of deep stricture had existed for ten years, which was relieved immediately and permanently by a single catheterization.

The congestive stricture is due to inflammatory swelling of the urethral mucous membrane, and generally occurs during the acute stage of gonorrhoea. If the retention is complete it is usually associated with a spasm of the compressor urethrae muscle. These conditions which are classified as spasmodic and congestive strictures are, more properly speaking, temporary obstructions, and not true strictures.

The most important and most frequent form is organic stricture, where there are actual changes in the wall of the urethra, forming a narrowing and rigidity. Sir Charles Bell has described it as "a condition in which the affected portion of the urethra has lost its dilatability."

Organic stricture may follow a severe traumatism, causing a rupture of the urethral wall and the resulting scar narrows the channel; or it may be, and is in 90% of the cases, subsequent to gonorrhoeal urethritis. It follows repeated attacks of urethritis, or is pre-

* Read before the Harrison County Medical Society, Cincinnati, July 1, 1907.

ceded by a long continued attack of gleet. It seldom occurs before two years have elapsed since the original attack of gonorrhoea, and may not give the patient much inconvenience for ten or twelve years.

The popular idea that rapid cure of gonorrhoea causes stricture is not based on facts, but on the contrary, the longer the duration of the attack the more liable is the patient to have a stricture. It is the exception for a urethra to become normal after even one prolonged attack of chronic inflammation.

The pathological process of stricture formation is a long story of cell infiltration and connective tissue formation (proliferation), which our limited time forbids us to discuss.

The site of the stricture is most frequently in the region of the bulbo-membranous urethra, but may be near the external meatus. The great vascularity, together with the numerous glands and follicles found in these regions necessarily form a rich field for the localization of chronic urethritis, thus predisposing to stricture. Gonorrhoeal strictures are never found beyond the membranous urethra.

The urethra behind a stricture becomes dilated, a pouch is formed which is a most excellent container and incubator for the germs of sepsis. Thinning of the wall, and ulceration may lead to rupture of the urethra with extravasation of urine, or to a periurethral abscess which may rupture externally, forming a fistula. In long standing, neglected cases the bladder takes on a compensatory hypertrophy as a result of repeated forcible efforts to empty itself through a narrowed outlet. In time cystitis may develop, to be followed later by involvement of the ureters and an infection of one or both kidneys.

In their incipency strictures produce but slight disturbances. The intelligent man observes that it takes him longer to urinate than formerly. As the stricture increases and the lumen of the urethra diminishes, the bladder is never entirely emptied, hence micturition is more frequent than normally. Micturition is not very painful, except in the extreme cases where the patient strains violently to force the urine through the narrowed channel. The forked, twisted stream is not characteristic of stricture. Dribbling after urination is due to a few drops held behind the stricture, escaping after the bladder has emptied itself. This occurs as an early symptom. Dribbling from an overdistended bladder due to a stricture is a very late symptom, and is worse during the day while the patient is up and about. When

due to an enlarged prostate it is worse at night. Sudden complete retention may develop, and the patient is not able to pass even drops of urine. This is due to a sudden engorgement of the mucous membrane over the stricture, and may follow exposure to cold, or the excessive use of alcohol.

In order to save the patient a great deal of trouble, and to avoid serious complications it is necessary to recognize the earlier stages of stricture. When there is a gleet, frequent micturition, dribbling after urination, with more or less hypogastric pain, we are justified in examining further.

In examining for stricture we must bear in mind that a spasm of the urethra is not a stricture in the proper sense of the term. If the surgeon accepts the patient's diagnosis, and begins at once to use a small sound, he may be misled into thinking a stricture is present when the obstruction is caused by the point of the small sized instrument catching in a fold of mucous membrane. Again the small instrument will not detect a stricture that is not very narrow. Any instrument that will pass through the external meatus should without difficulty pass the rest of a normal urethra. Therefore, in order to ascertain the presence of a stricture the first instrument to be used should be as large as the meatus will admit readily. The possibility of doing damage to the urethra and of creating a false passage is far less with a large sound than with a small one. It is seldom wise to use much force in passing a sound. If the first instrument tried does not readily pass, try a smaller one, and so on until one is found that will pass. The wisest plan for all who are not specially skilled in the use of sounds and bougies is to refrain from the use of small metal instruments. The small flexible bougies, even in the hands of the unskilled, will at least do no harm, and will often be of great service.

The treatment of organic stricture is both general and local. In general special attention should be given to the patient's hygiene. The diet should be bland and not stimulating. Alcohol and tobacco are to be excluded. Sexual excesses to be avoided. No exposure to cold and wet. Rest in the recumbent posture as much as possible. Alkalies internally to neutralize the urine is also beneficial. Hexamethylin tetramin is valuable in rendering the urine aseptic.

The local treatment consists of using such measures as will overcome the abnormal narrowing of the canal, and restore as nearly as possible the normal dilatability of the urethra. The best way to accomplish this is by

the process known as gradual or intermittent dilation. This applies to about 98% of all cases, when properly executed. The bougie or sound is the best instrument to use. The passage of a sound through a stricture not only acts in a mechanical way by increasing the caliber of the urethra, but it stimulates absorption of the inflammatory product. This requires patience on the part of both the surgeon and the patient. It must be done slowly. If too much is done at one treatment, the mucous membrane is damaged, which may produce more swelling and inflammation, thus defeating the very purpose of the treatment.

In the beginning sounds should be passed every 3 or 4 days. When a sound as large as 18 F. will pass easily, then once a week is often enough. Later on, once a month, then 2 or 3 times a year.

All instruments must be scrupulously cleaned and sterilized. They should be warm and well lubricated before using. If possible it is well to keep the patient in bed from twelve to twenty-four hours before treatment. If the patient is very nervous it is quite helpful to give him twenty grains of sodium bromide and five grains of chloral hydrate about one and one-half hours before the use of the sounds or bougies. It also facilitates matters to give him a sitz-bath for twenty minutes just prior to treatment, especially if there is much rigidity of the perineum. The penis must be held vertical and kept well on the stretch so as to obliterate the mucous folds as much as possible.

Probably the most common error in the use of metal sounds is to think that the tip of the instrument is engaged in the opening of the triangular ligament before it really is, and the handle is raised too soon, thus forcing the instrument through the roof of the urethra, thereby making a false passage. When the stricture has been reached, the surgeon should grasp the sound lightly between the thumb and and forefinger, manipulating it very much as he would a probe, employing the greatest of gentleness. Sometimes the forefinger of the other hand can be used to guide the tip of the sound by making pressure on the perineum, or by introducing it into the rectum.

It is the very tight strictures that test the skill and patience of the surgeon. However, no stricture should be condemned as impermeable so long as urine escapes even though it be by drops. If the smaller sounds do not pass, then try the so-called filiform, which is usually made of whale-bone. In the absence

of this, ordinary silk-worm gut ligatures will answer very well. Before attempting to pass the filiform, there should be instilled deep into the urethra, with an urethral syringe, ten drops of a 2% cocaine solution to which has been added five drops of solution adrenalin chloride (1-1000). This will lessen the irritability of the urethra, and diminish the vascularity of the parts. Wait five minutes, then inject one-half dram of sterilized olive oil, and there will be plenty of the lubricant at the tip of the instrument. Introduce into the urethra down to the stricture, one filiform after another until one finds its way through the narrow opening. If great difficulty has been experienced in passing even the filiform, it is better to pass over this a tunneled catheter, remove the filiform, and leave the catheter in for twenty-four hours, after which gradual dilatation can be continued. Sometimes if a medium-sized sound is held firmly against the strictural obstruction for a minute or two it will relax sufficient to allow a filiform to pass. The urethroscope is sometimes a valuable aid in finding the strictural opening.

It is well to bear in mind the complications that may attend the passage of sounds. If the patient is of a neurotic temperament, he may become collapsed from the shock. This may in some cases be avoided by the injection of a few drops of a 4% solution of cocaine into the urethra. When it occurs give thirty drops of the Arom. Spts. of Ammon, and keep the patient in bed for the rest of the day.

If the patient be plethoric and has been eating and drinking to excess, the mucous membrane may be extremely congested, and even a soft instrument may cause bleeding without serious damage to the parts. This may be prevented by keeping patient in bed for a few days previous to the instrumentation, allowing him only a light diet, and producing free catharsis with salines. The injection of a few drops of adrenalin will be of service in these cases.

The passage of a sound sometimes produces a condition known as urethral fever or catheter fever. The severity of this condition varies from a slight rigor to a distinct chill followed by fever and the usual symptoms of acute sepsis. It may pass off in a few hours or it may incapacitate the patient for several days, or it may prove to be a very serious and dangerous complication. The milder forms are said to be due to the contact of the instrument with the prostatic portion of the urethra, and that it can be avoided by introducing the instrument no further

than the strictures. As a prophylactic treatment it is well to keep the patient in bed for twelve to twenty-four hours before the time of instrumentation, and give gr. x of quinine with ten drops of the tincture of aconite one-half hour prior to treatment.

As has been mentioned above, false passages in the urethra may be made with a sound. This, however, will not occur if the operator will bear in mind that no force is to be used in the introduction of any instrument into the urethra.

Epididymitis may, but seldom does follow the passage of a sound.

When the stricture is very tight and there is a severe cystitis present, it is best to give a general anesthetic, dilate sufficiently to introduce a catheter and fasten it in for 24 to 36 hours. This insures drainage and allows irrigation of the bladder with a saturated solution of boric acid, or a 1-2 of 1% sol. nitrate of silver. Do not leave the catheter in more than 48 hours without removal, as it may cause severe and serious urethral infection, also periurethral infection which may be followed by urethral fistula, or prostatic abscess. After a catheter has remained in the urethra for 24 to 48 hours, there is but little difficulty in further dilating with the sounds.

Internal urethrotomy is to be condemned because of the obscurity of the field of operation, and the possibility of doing great damage. The cavernous spaces may be opened which is followed by a very free hemorrhage, sometimes almost uncontrollable.

The indications for perineal section are few, in the treatment of strictures. The

most imperative is stricture due to trauma. Early operation in traumatic strictures is usually followed by permanently good results. It is astonishing how much of the urethral mucous membrane will be restored after the excision of the fibrous tissue of a stricture.

The irritable resilient stricture of the bulbo-membranous region, in which every attempt at instrumentation causes severe pain, urethral spasm, subsequent tenesmus, and possibly chill and fever, requires an external urethrotomy; with free division of the fibrous bands. In the cases where urinary fever follows each dilation, prolonged treatment may be followed by prostatic abscess. Strictures complicated by fistulae and severe cystitis should be treated by perineal section as a last resort, after dilation has proved inefficient.

The points I wish to emphasize are:

1. That almost every stricture which is secondary to specific urethritis, is amenable to gradual, intermittent dilation.
2. That the strictest asepsis should be observed in the treatment of urethral strictures.
3. That the small metal sound is a dangerous instrument.
4. That the first principle to be observed in the introduction of any instrument into the urethra is that NO FORCE is to be employed.
5. That internal urethrotomy is unsafe, and should never be attempted by the unskilled and inexperienced.
6. That external urethrotomy is very seldom indicated in other than traumatic strictures.

OFFICIAL REPORT OF THE PROCEEDINGS OF THE FIFTY-SECOND ANNUAL SESSION OF THE KENTUCKY STATE MEDICAL ASSOCIATION, HELD AT LOUISVILLE, OCTOBER 15, 16 AND 17, 1907.

MONDAY, OCTOBER 14.—FIRST MEETING OF THE HOUSE OF DELEGATES.

The House of Delegates convened at the Galt House at 7:30 P. M., and was called to order by Dr. John H. Blackburn, Vice-President, in the absence of the President, Dr. Griffith.

The Secretary called the roll, after which President Griffith arrived and took the chair.

THE PRESIDENT: The next order on the program is the reading of the minutes.

THE SECRETARY: Inasmuch as the minutes were published in THE JOURNAL immediately following the last session, I move that

the reading of them be dispensed with.

THE PRESIDENT: The next thing on the program is the Report of the Council, Dr. J. Garland Sherrill, Chairman.

DR. SHERRILL: I will say, the report of the Council appears in the October issue of the Journal. (See page 18.)

Dr. Sherrill read the report, after which it was moved that it be accepted. Seconded.

The Secretary moved to amend that the report be referred to the Committee on Reports of

Councilors, with the exception of that part of it which pertains to advertising, and that it be referred to the Committee on Pharmacology.

The amendment was seconded, accepted, and the original motion as amended was carried.

THE PRESIDENT: We will now listen to the report of our Treasurer, Dr. W. B. McClure.

Dr. McClure presented his report as follows:

To the House of Delegates of the Kentucky State Medical Association:

Gentlemen: I beg leave to make the following report as to the financial standing of our Association on October 1, 1907.

Balance on hand in the Third National Bank of Lexington, Kentucky \$3,301.03
Amount collected through the Secretary, Dr. A. T. McCormack 6,161.40

Total \$9,462.43

Total disbursements, for which I hold voucher checks \$6,052.29
This amount deducted from the total leaves a balance on hand in the Third National Bank of Lexington, of 3,410.14

For this amount I hold a certificate of deposit amounting to \$593.30.

Since the terminus of the fiscal year, October 1st, I have received from the Secretary money amounting to \$461.25; also bills payable, amounting to 503.30

But as these two items came into my hands after the close of the fiscal year, October 1, 1907, I assume that they should be reckoned with as of next year's transactions.

Respectfully submitted,

W. B. M'CLURE, Treasurer.

It was moved and seconded that the report of the Treasurer be referred to the Committee on Finance. Carried.

THE PRESIDENT: The next order is the report of the Secretary.

DR. DUNNING S. WILSON: I move you Sir, that the reading of the reports of the Secretary and of the Councilors which have been published in the Kentucky State Medical Journal for October be dispensed with, and that the fifth and ninth district reports, which I understand have not been published, be read. Seconded.

It was moved to amend that the report of the Business Manager be included, and that the Councilors who have supplementary reports make them as their names are called.

The amendment was seconded, accepted, and the original motion as amended was put and carried.

THE PRESIDENT: We will listen to a report from the First District by Dr. Richmond.

The Secretary moved that these reports be

read, and then referred to the Committee on Reports of Councilors.

Seconded and carried.

Second District.

DR. J. W. ELLIS, of Masonville, said he had no supplementary report to make other than that which appeared in the October issue of the Kentucky Medical Journal.

Third District.

DR. ERNEST RAU, of Bowling Green, had no report to make except that which had already been published.

Fourth District.

DR. D. C. BOWEN, of Elizabethtown, said that since making his preliminary report they had organized in Hardin County a post-graduate course, which he believed is going to make a hit. They were going to meet with the members of Nelson County at New Haven, and hold an open meeting for the purpose of discussing the subject of tuberculosis before the lay public. It is hoped that a great deal of benefit will be derived from such a meeting as this.

Fifth District.

DR. J. GARLAND SHERRILL, of Louisville, stated that as Councilor for this District he had been unable to give the Councilor work as much attention as he would like to have done, notwithstanding the fact that this District shows a larger and healthier growth than in any previous year, there being a gain of forty-two members. He has been promised a number of new members for Jefferson County in the next year. The largest gain has been in Jefferson County, so far as membership is concerned, there being thirty-five new paid up members. They have a number of members who paid the year previous, but who have not paid thus far this year. The gain in membership in this District is as follows: Anderson, 7; Carroll, 1; Franklin, 2; Jefferson, 35; Trimble, 2; Owen, a loss of 1; Boone County, minus one; Gallatin County, no report, and a loss of 5.

Seventh District.

DR. J. T. WESLEY, of Middlesburg, said he had no supplementary report to make except a word of explanation. The District he represents is in fairly good working order. It is composed of eight counties, all of which have been organized and are doing good work. They have approximately 126 doctors in the District. In his preliminary report he reported about 100 as being members of the different societies. Since

that report there have been a few additions. He thinks now that there are about 105 to 106 members, with about 20 non-members in the district. Those who comprise the non-members are largely old men who have retired practically from practice. There are a few who have turned their attention to other things, such as farming and mercantile pursuits. He realizes that it is going to be very hard work to keep the society up to what it is at present. However, the District at present is in good working order.

Eighth District.

DR. J. E. WELLS, of Cynthiana, had no supplementary report to make.

Ninth District.

DR. J. W. KINCAID, of Catlettsburg, said that his District is composed of eleven counties, of which seven are organized, four having been organized recently, and one revived. Organization work was late in being started this year, owing to circumstances which he could not control, but when commenced, it was pushed vigorously. In this work he has had the hearty co-operation of Dr. Shirley, Councilor of the Tenth District, who accompanied him on his visits to the counties of Carter, Lawrence, Johnson, and Floyd, during the fourth week of September. Owing to a delayed train, they could not keep an engagement in Greenup County, but he communicated with them by telephone and the doctors organized without them. He was again denied the pleasure of meeting with them last Thursday, on account of professional duties at home which could not be ignored. The spirit manifested everywhere was encouraging, and the enthusiasm and numbers in attendance in Carter and Johnson were particularly gratifying. At all points visited he presented the subject of post-graduate work, as outlined by Dr. Blackburn, as forcibly as he was able to, urging the adoption of as much of it as could be adapted to their respective needs, which he feels sure will be done as committees were appointed with that end in view.

In Boyd County it has already been made effective in part, and they are holding meetings every two weeks in regular quarters, at which will be found present most earnest and efficient physicians.

The organization in Lewis County seems to have lost interest, and he is sorry to report that he was unable to visit the physicians there this year, but hopes to do better.

Martin and Magoffin Counties remain unorganized, owing to the small number of physicians, but as he is informed, their ranks have

been increased this summer by recent graduates, he expects to get a foothold in them next year. The appended list gives the number of members last year and this:

County.	1906	1907.
Boyd	15	17
Carter	0	19
Greenup	0	6
Lawrence	3	8
Johnson	0	16
Floyd	0	16
Fike	5	11
Martin	0	0
Magoffin	0	0
Lewis	0	4
Elliott	3	5
Total	26	95

Before closing his report, he wanted to say a word in commendation of Dr. A. T. McCormack, the State Secretary, who had rendered him valuable assistance in circularizing his District, and has been accommodating in all respects at all times.

Tenth District.

DR. I. A. SHIRLEY, of Winchester, said he had but a word to add to the report that had already been published in the Journal. He wanted to say, however, that the other ten Councilors have long since abandoned the hope of ever accomplishing as much good as the Tenth District is doing. (laughter.) An approximation to that good is all they hope to attain. The Secretary of the State Society has given us an increase of about twenty members, when we are entitled to thirty. Owsley County, which heretofore had four members, now has five. Wolfe County has eleven doctors, and ten are members. The other one is not worth a continental. (Laughter). Powell County has thirteen doctors, and twelve members. The thirteenth fellow is strictly no good. He said there is one thing in his District that is unique, namely, Rowan County has ten paid up members, and still there are but eight practitioners in the county. (Laughter). He doubted whether there was any other district or county which could beat the Tenth District.

Eleventh District.

A report from this district was called for, but passed in the absence of the Councilor, Dr. G. E. Cecil, of Flat Lick.

THE PRESIDENT: You have heard the reports of the several Councilors. What is your pleasure?

THE SECRETARY: I move that these re-

ports be referred to the Committee on Reports of Councilors. Seconded and carried.

THE PRESIDENT: I will ask the Secretary to call the Counties, and as each County is called the member or members of the House of Delegates from that County will please respond.

Adair County.

DR. U. L. TAYLOR said he did not know that he would be expected to make a report at this time. He would try to present a written report before the Association finally adjourned. He said the County Society is in good condition, and most of the physicians residing therein were members. It is a hard matter to induce them to attend the meetings. However, he could say this much for the members, that they paid their dues. The Society is in better condition than it has been for some time, and he hopes that every doctor in the County will become a member of the Society, particularly those who are in good standing.

Ballard County.

DR. N. L. ROGERS said this County Society is in good shape. There has been only one malpractice suit in the County in the last four or five years. Nearly all of the physicians in the County belong to the Society, but those who do not, do not amount to much as practitioners, and may never become members of it.

Bath County.

DR. R. E. EVANS said this County Society is in good shape. It meets once a month. There are only two doctors in the County who are not members.

Boyd County.

DR. G. W. MOORE said the Society is in good condition, it holds monthly meetings, with a fairly good attendance. There has been no malpractice suit in the County within the last ten years.

Calloway County.

DR. W. H. GRAVES read a report of the work that is being done in this County.

Campbell-Kenton County.

A representative from this County said he had no formal report to make. He believes that this Society is second in the State in numbers. During the past year they have organized a post-graduate course. The Society holds its meetings once a week. Good work is being done. These meetings are well attended. He believes that the Society would increase its membership

to over one hundred members in the next year.

THE PRESIDENT: Before the reading of the next report, the Chair wishes to say that the Secretary-Editor of the Journal of the American Medical Association is present, and I think it is appropriate and courteous for this body to extend to him the privileges of the floor, and I trust a motion will be made to that effect.

As Dr. Simmons was not in the hall, it was moved and seconded that a committee be appointed to find him and extend to him the courtesies of the session. Carried.

The President appointed as this committee Drs. Clarence H. Vaught and C. Z. Aud.

Carlisle County.

A report from this County was called for and passed in the absence of the Delegate from that County.

Carroll County.

DR. N. C. BROWN said that this is a small County, and necessarily they have a limited number of physicians in it, there being only 16 in the County altogether. Of this number, they have 11 active members of the Society. Meetings are held quarterly. They are all well attended, and there is no discord among the physicians of the County, so far as he knows.

Casey County.

DR. L. F. HAMMOND reported 15 members, which is all the physicians in the County, and one more. Since making his report, Dr. P. S. Humphrey has removed to Ashland, Ky. Dr. Oscar L. Mays graduated in June, and they hoped to enlist him in the society, but he went to Cleveland, Ohio. The profession in his County is very well united. They are not as prompt in attending meetings as they should be, but he hopes for better attendance in the future. There has never been a malpractice suit in the County.

Christian County.

DR. D. H. ERKELETIAN reported the general condition of the Christian County Medical Society. They have 34 paid up members, two of them being homeopaths. There have been 9 new members elected this year, and 10 more members have paid this year, which they failed to do in the past. The general attendance has ranged from six to thirty-one. There were 23 clinical cases reported to the Society. The papers were highly scientific and up to date. The discussions were full. Generally dinners were given to the Society by some members at their homes.

The Society was royally entertained also at the Western Kentucky Asylum. The dues were sufficient to meet the expenses. They have had as guests some prominent physicians from a distance to address them. The programs were mapped out in a most fascinating manner in order to induce the profession to attend; and the new feature of the work was to acquaint the laity through the press with the proceedings of the meetings. There has always been a good feeling on the part of physicians in this County, although there was a slight disagreement in regard to the insurance question. One great secret of success of the meetings of this year lies in the untiring efforts of the officers of the Society. The work of Dr. A. H. Edwards, the Secretary, was commended.

Clark County.

DR. S. W. WILLIS reported 23 doctors in the County, and of this number they have about 13 members. The Society has been organized nearly 30 years. It has had more members than this, but some have withdrawn. There are about 20 physicians in the County who are not members of the Society. He regretted this exceedingly. Any man, particularly a physician, who wishes to be progressive and to keep up with the procession in this day and time must not absent himself from his County Medical Society, his State Society, or any other medical society that he can avail himself of. (Applause.) Any young doctor, who fails to identify himself with his County medical society, is either badly taught, or he is certainly traveling the wrong road. The Society is working very harmoniously. The physicians in the County who are not members need exhortation and talks on brotherly love and fellowship. The society meets monthly. As a rule, two papers are read, followed by free discussion.

Crittenden County.

DR. T. A. FRAZIER said there are 21 registered physicians in the County. They reported this year 14 members. Since the last regular meeting they have admitted two new members. There has not been a malpractice suit in the County for fourteen years.

Daviess County.

DR. S. J. HARRIS reported that this Society is in a flourishing condition. There are about 86 registered physicians in the County, and of this number 68 are members of the County Medical Society. Of the remaining 18, 5 have applied for membership. The physicians in this County are working harmoniously together. He has only known of two malpractice suits in the

County, and he has been located in it for thirty-five years. The Society meets quarterly, three-fourths of the meetings being held at Owensboro. The Owensboro physicians attend the meetings. Some of the physicians entertain the others at these meetings. Some of the meetings are attended by the laity, who manifest great interest in the proceedings.

Fayette County.

DR. F. H. CLARK said there was a general feeling of harmony and good will among the members of the profession in this County. So far as the city of Lexington is concerned, they have an excellent society. One difficulty was to get all of the members, particularly the active practitioners from the County, to attend the meetings. They have a plan in view to increase the attendance at the meetings, and he expressed the hope that they would be able to do much better the coming year.

There have been four suits for malpractice in the last ten years, three of them brought against surgeons of the County, three decided against the doctor, and one in favor of him.

Grayson County.

DR. J. T. GREEN said the profession in this County is in a better condition than he has ever known it. There are about 26 active registered physicians in the County, and 22 of these are members of the County Society in good standing. The County Society has made the profession a power for good in the County. The members are zealous in the work of the Society. The misunderstandings and hatred that formerly existed in the profession have given way to a better feeling and unity of action. The profession is on a higher plane morally and mentally as well as socially. He believes the report next year from this County would include every reputable physician in the County. To Drs. D. C. Bowen, Councilor, and C. Z. Aud, is due the credit of counseling some opposing forces which were calculated to do the profession irreparable injury in Grayson County.

In the last ten years there have been two malpractice suits in the County, and a number threatened. In the last four years there has not been a threatened suit. These suits were brought for dislocated hip complicated with fracture, and dislocation of the elbow complicated with fracture. The average cost in these two cases was about \$250.00; judgment in each case for the defendant.

Hardin County.

DR. O'CONNOR reported that this county So-

ciety is in a flourishing condition. They have always had a good medical society at Elizabethtown, and for ten years they have been having monthly meetings, at some of which there were more doctors present than there were physicians in the County, physicians coming from such counties as Meade and occasionally from Jefferson. They have taken up post-graduate work, and the members are highly pleased with it so far. They have not had a malpractice suit in Hardin County during the last ten years, nor for fifteen years before. He thinks that these monthly meetings have a good deal to do with the absence of such suits. They point with pardonable pride to being the first County in the State of Kentucky, so far as he knows of taking the initial step in protecting themselves against life insurance companies, requiring a fee of not less than \$5.00 for all examinations. At a regular monthly meeting, held in February 1896, the Secretary was instructed to notify the doctors in the County that a meeting would be held in Elizabethtown on the 18th of March. At this meeting an agreement was drawn up that no life insurance examination should be made for less than \$5.00. This agreement was signed not only by the doctors who were present at this meeting, but those who were not. Every doctor in the County signed it. Up to this time no one had violated this agreement. (Applause).

The Society has twenty-nine paid-up members, out of possibly thirty-five physicians in the County, including three homeopaths, and some five or six doctors who have retired from practice. The Society also had the distinction of furnishing the last President of the State Medical Society. (Applause). While this County Society had settled on a fee of \$5.00 for all insurance examinations in March, 1896, it had taken the State Society until October, 1906, to agree with it. The Society had the distinction, too, of having one of its members appointed as delegate to the Pure Food Congress, and the Society has always stood in favor of pure food laws.

Harrison County.

DR. L. S. GIVENS said they had 29 members in their post-graduate medical society, which has been existing for nearly two years, and this number embodies nearly every doctor in the County. The recent post-graduate course, recommended by Dr. Blackburn, has been started, and they have already had two meetings. The Society is progressive. There has not been a malpractice suit in the County in the last ten years, and the prospects are they will have none in the next decade.

Hart County.

DR. RICHARDSON said they have 24 physicians in this County Society, an increase of 6 members, with 2 deaths. The papers have been well discussed. There have been no malpractice suits.

Henderson County.

DR. ARCH DIXON, of Henderson, presented the following report of this County Society:

Total physicians in County, 64; total membership, dues 1907, paid to Secretary, 38; reported to Secretary State Society, with check, 28; total unreported to Secretary State Society, but check accompanying this report, 10; superannuated, 7; retired from practice and engaged in other business, 5; past active life, but still trying to practice, 3; eligible to membership, 11.

Unreported by Check—Dr. J. H. Hammer, Alzey; Dr. O. G. Jones, Smithsmills, Dr. Ira D. Cosby, Hebbardsville; Dr. M. H. Yeaman, Louisville; Dr. C. Negley, Zion; Dr. Jas. W. Cooper, Smithsmills; Dr. Park L. Berkshire, Spottsville; Dr. C. H. Drane, Henderson; Dr. W. M. Floyd, Corydon; Dr. W. M. Hanna, Henderson.

Check for \$20.00 enclosed to cover membership fee for these ten.

There have been only two suits for malpractice in the county for fifteen years, both in cases of fracture, neither of which was successful. The general condition of the Association is good.

Hickman County.

A written report of this society was presented, but not handed in.

Hopkins County.

DR. B. P. EARLE said he was gratified to hear the Councilor say in his excellent report that the physicians in this county were up-to-date men. Hopkins county has 65 physicians, which includes osteopaths and colored physicians. Of this number they have only 15 members. They have only met twice in the last twelve months. They have decided to meet oftener and to report cases and discuss them. They have discussed the question of fees for life insurance examinations, but have not come to any agreement. He thinks there are very few physicians in the county who will make a life insurance examination for less than \$5.00. As to malpractice suits, they have had four in the county within the last ten years.

Jefferson County.

DR. WM. BAILEY said they have some things peculiar in this county which are not observed in other counties, and sometimes these matters are difficult to manage. In other words they have medical schools in Louisville. Last spring, during the development of considerable agitation, there was a little flirting between them, which was satisfactory to many physicians, and two of them were married, a good solution as far as it went. A little later some little attention was being shown by two others. In short, the banns were published, but finally it was found to be simply a flirtation. (Laughter.) It failed to go through. He thinks that while Louisville has fair medical schools, it will have better ones; and while it graduates fair doctors now, they will make better ones in the future. This is his hope for Louisville in this regard. The condition of the profession in Louisville is better to-day than it has been for forty-four years in which he has practiced in this city. He hopes it will still be better. The new organization has been a great help to the profession in this regard. They have in the county over six hundred physicians. There are 226 paid up members in the Jefferson County Medical Society. The society is now doing admirable work, and much better than it has done before. All things considered, he presented an optimistic report for the Jefferson County Medical Society. They have a Milk Commission which is doing admirable work, and if country doctors would not allow milk dealers to send infected milk to Louisville and other places, they would have less trouble with children in the summer time. When once milk is infected, disinfection does not accomplish the purpose. This subject was thoroughly discussed before the recent meeting of the American Public Health Association, and men representing commercial interests made a statement to the effect that at the present price of milk good milk could not be furnished. At this meeting he remarked that "If you can only furnish food which doubles the mortality in children, for God's sake quit making milk, if you cannot make it good and pure." (Applause.)

Lewis County.

A member from this County said they had recently organized a society with only 5 members, although there are 17 physicians in the County.

Livingston County.

DR. HAYDEN said they had recently re-organized the Livingston County Medical Society. There are eighteen physicians in the County, and they hope to make a favorable report at the next meeting.

Logan County.

DR. D. G. SIMMONS reported as follows:

1. The Society has met regularly, and the average attendance has been better than ever before. The Society meets at Russellville, the County seat, bi-monthly during the winter months, but during the summer months it meets monthly promiscuously throughout the County by invitation. There has been a commendable spirit of rivalry between the different County towns in the effort to secure good programs and good attendance.

2. Efforts were made by each town to devise some novel feature at each meeting to attract attention, and to promote increased interest and attendance. Members of surrounding county societies were personally solicited to attend and participate in these meetings, and these efforts have encouraged and secured a better fraternal and social feeling between the members of the County society, as well as toward those of surrounding counties.

3. Judging by results observed in this part of the State, the County societies are doing good and lasting work, socially, fraternally and scientifically. True, there are still some physicians who are not identified with societies, but most of those not so identified would not be greatly useful or ornamental to these societies. Still it is desirable that all who are in the practice of medicine should be harmonious and of one accord.

4. He knows of but one damage suit against any doctors in his County for some years past, which case was decided in favor of the defendant.

McCracken County.

DR. FRANK BOYD said that this county has 43 doctors, and perhaps about 35 active practitioners. The doctors of this County society follow closely the post-graduate work laid down by Dr. Blackburn in *The Journal*. This post-graduate work has been going on for two and a half years. The society meets every Tuesday. McCracken County has the third largest society of any single county in the State, and in point of efficiency he does not think it has a peer. The doctors as a body are fraternal. As to damage suits, in the last ten years there have been two cases of malpractice, the first of which is settled. The nature of this suit was an X-rays burn. The second suit was brought for the treatment of an eye, but the jury brought in a verdict for the defendant.

Madison County.

DR. C. H. VAUGHT said that this county society has had an increase of four members.

There are 44 physicians in the county, with a membership in the county society of 17. There are six physicians in the county who have retired from practice—two negro physicians, two homeopaths, and two osteopaths, the latter being ineligible to membership. The society is not particularly anxious for numbers, but for the quality of its members. While the society is not large, they can rely on its present members as to loyalty, integrity, and devotion to principles. This, in his judgment, was the most important feature in connection with membership in a county medical society. The laity is interested in public health matters there. They had a meeting at the Eastern Kentucky Normal School, at which some seven hundred young men and young women were present and showed great interest in questions pertaining to hygiene and everything that relates to the betterment of school children over whom they preside. Lawyers, editors, and preachers should be invited to attend such meetings, at which doctors should not indulge in technicalities, but speak in plain English, so that they can understand, then they would become interested in the work of physicians. In this way greater and grander work can be accomplished by enlisting the sympathy of the people.

So far as the records show, there has not been a single suit in Madison County for malpractice.

The members of this county society would always remain absolutely loyal to the State society under all circumstances and at any cost. (Applause.)

Meade County.

DR. B. R. WALKER regretted to say that Meade County Medical Society is not in good working order. So far as paying dues is concerned, all members have paid up except three, and these are new members. There has been no malpractice suit in the county in the last ten, perhaps twelve or fifteen years, except one suit, since he has been practicing there in the last twenty-two years. In this case judgment was in favor of the defendant. The society has agreed not to make life insurance examinations for less than \$5.00. He does not think there is a man in the county who will make such an examination for less than that.

Nelson County.

DR. HUGH D. RODMAN said that as the representative of Nelson County he wished to submit a report as to the condition of the medical profession there. They have in Nelson County 29 physicians, who are endeavoring to practice medicine, although the State Secretary says

that they have 32. Of these, 29 doctors, 22 are members of the county society, and 7 are not members. Of these 7, there are 2 whom he hopes to bring into the fold, although the persistent efforts of the State Secretary, the Councilor and himself, during the last six or eight month, have failed, and yet he has hoped that these few will become members, as they are young men. The other 5 he has no hope of ever getting into the ranks, as they are not made of society material.

In addition to the Nelson County Medical Society, the doctors in Bardstown, 7 in number, have a society of their own, and they meet once a month in each others' offices, discuss matters of interest to themselves, and by this means keep up friendly, social relations, which would not otherwise exist. They have a fairly good county society, which meets quarterly. The physicians of Nelson County are to-day more friendly, more social, more agreeable, and have one another's good more at heart than they have ever had before.

He thinks that in the organization of societies the use of the telephone has done more to bring about these results than all other factors together. In the society they are brought into direct contact, they learn to know and esteem one another, and by the telephone they are brought into direct communication, which engenders a more friendly feeling, and encourages an interest which causes their hearts to beat more in unison and brings about a more brotherly feeling among them. He advised every doctor in the land who has a phone to call up his neighbors often, pass a few friendly words with them, advise with them about a serious case, and in this way keep up the relation of neighbors.

In March, 1906, the Nelson County Medical Society took up the insurance examination fee business, and every doctor in the county soon signed an agreement not to examine for any life insurance company which paid a less fee than \$5.00 for each complete examination. For a while the solicitors for the \$3.00 companies annoyed them in many ways, but they adhered to their agreement, and the result was that in a very short time the \$5.00 companies were doing all of the work, and they see no more agents, soliciting for the companies that are paying only \$3.00 for such examinations. He believes that this society was the second in the State to take such action, and Hardin and Nelson county societies deserve a great deal of credit for the final ousting of these scabs. There have been no suits for malpractice in the county in the last dozen years. All the physicians in Nelson County are moving along in a smooth, even, friendly way, and when they meet they give each other a hearty handshake, with "I am glad to see you, old pard, how are you?"

Ohio County.

DR. OSCAR ALLEN read a report of the work that is being done by this county medical society.

Pendleton County.

DR. H. C. CLARK said that this society is in a flattering condition. The society lived for 18 years on 2 members. In the last four years the membership has been increased to 21. There are 26 practitioners in the county, and since the county reports have been made they have added 6 new members to the society. They meet bi-monthly. Not a meeting has been missed. They sometimes have three short papers, which are generally well discussed; also reports of cases. Recently the society has taken up the work of delivering lectures to the public at public school-houses on tuberculosis, its prevention, and protection from it. The members of the profession in this county are sociable. They begin the meetings early, have a three hour session in the forenoon, and one of three hours in the afternoon. When they recognized the society four years ago, it was a difficult matter to get the members to open their mouths, but now it was very difficult to induce them to keep them closed. They have had two malpractice suits in the last twenty-five years. There are five doctors in the county who are not members of the society. One of these is not a member of the regular school; the other four are undesirable citizens. There is not a doctor in the County Society who is not in harmony with every other physician. They have arranged to carry on post-graduate work in a limited way.

Rowan County.

DR. ALEXANDER SCAGGS said there are nine registered physicians in this county, and eight of the nine belong to the society. There are two physicians who live outside of the county who belong to the society. The one who does not belong to it lives in the country away from any town, although he has promised to join. He has attended every meeting but one since he has been a member. At one meeting he was the only member present. He hopes that sufficient interest will be aroused so as to get every doctor in the county to attend the meetings regularly.

As to malpractice suits, there has not been one since he has been in the county, but previous to his locating there a suit was brought against a physician who lived in another county. No judgment was rendered against him, however.

As to the fee for life insurance examinations, every member of the society has signed a pledge not to make any life insurance examination for any life insurance company for less than \$5.00.

Shelby County.

DR. T. J. HOWES said they have in the county of Shelby 39 physicians, 18 of whom are in good standing. The meetings of the county society are not regularly attended.

As to malpractice suits, there has not been one in the county in the past twenty-two years. These 18 members, who are in good standing, are enthusiastic. They rarely ever get over eight or ten at any one meeting. They hope to have better meetings in the future. A spirit of brotherly love exist among the members, and there is more sociability at present than there has been since he has been a member. They are trying to get the other physicians into the society.

Simpson County.

DR. F. LONDON said there have been no malpractice suits in the county, as could be seen by reference to the October issue of *The Journal*, and there has not been for some time.

Taylor County.

DR. J. L. ATKINSON said the physicians of this County are all on good terms, and all who can be induced to take any interest in organized work are members of the society, and are working in harmony. Two of the registered physicians are druggists, and not in active practice. Two more are old men living a long distance in the country, and two of the younger men are more interested in other affairs than in the practice of medicine. No amount of pressure can get these men into the society. The members stand together for fair fees for insurance examinations and all organized work. They hold monthly meetings, which are fairly well attended. The number is small, but they maintain a live county organization. No suits for damages or malpractice have been brought in the county during the past twenty years.

Trigg County.

DR. J. H. LACKEY said there are 16 physicians in this County. About half of them are graduates of medical colleges in Nashville, and nearly the other half are graduates of Louisville colleges. He thanked Dr. Richmond for his visit to the county society at the beginning of the year. His visit enthused the members, and infused new life into the society, and since his visit they have been doing fairly well. Harmony

prevails among the members. There are eleven paid up members, leaving 5 on the outside. Of that number, 2 have never made application. The other three have done so, but have been rejected for cause. The society has adhered closely to the rule not to make any life insurance examination for less than \$5.00. There has not been a malpractice suit in Trigg County. Society work was growing so rapidly that there is great reason to take courage and to press on.

Union County.

DR. L. S. HENRY said they have 33 physicians in the county, one homeopath, one osteopath, and 31 regular physicians. Of this 31, 28 belong to the Union County Medical Society. The society has been in existence about fifteen years. Of the 28 that belong to the society, one-half of them attend the meetings regularly, while the other half do not. The meetings are held at Morganfield. There are three physicians who do not belong to the society, not because they have not tried to get in. They are quacks of the deepest dye. They do not want them. They believe in quality, and not quantity, of membership.

The records of Union County do not show any malpractice suit ever having been instituted.

In regard to insurance examinations, when the old line companies began to cut down the examination fee, the doctors in Union County refused to examine for them. The society meets the first Wednesday of every month. While they found it good to meet quarterly, they realized it would do them more good to meet twelve times a year. They invite physicians from other counties to meet with them, and in the last eighteen months they have had physicians both from Warren and Jefferson counties. Dr. McMurry addressed them not very long ago. They have had physicians from other counties to speak to them on several occasions, such as Drs. Hayden and Walker, from Evansville, Indiana. This makes the meetings interesting and encourages home physicians to attend them.

Trimble County.

DR. L. G. CONTRI said that this society has eight members. The society meets every month, when papers are read and discussed. Once a year they have an outing and meet in the woods. Professional friends are invited to these outings. They had eighteen visitors at the last meeting. Dr. Stucky gave them a paper. The members of the society charge \$5.00 for making life insurance examinations.

Warren County.

DR. FRED D. CARTWRIGHT said the conditions in Warren County were very flourishing, owing largely to the untiring efforts of Drs. A. T. McCormack, John H. Blackburn, and J. N. McCormack.

As regards malpractice suits, there have been two in the last ten years. He was defendant himself in one. The suit was withdrawn before it was brought to trial. Another case, brought last year, was thrown out of court, after Drs. Blackburn and McCormack testified in behalf of their brother physician. He does not think there will be any malpractice suit brought there very soon after such a sweeping victory for the defendant.

Wolfe County.

DR. J. L. COX said there are 21 resident physicians in the County at present, and of this they have 10 who belong to the society. Eleven are registered, so there are only 10 left. The society is progressing, and every legal practitioner in the County belongs to the County Medical Society.

In regard to life insurance examinations, they do not make them for less than a fee of \$5.00. There has been no malpractice suit in the last few years, with the exception of one, and this resulted in a victory for the defendant.

Woodford County.

DR. J. W. CRENSHAW said there are 22 physicians in this County, 16 of whom belong to the County Medical Society. They have three homeopathic physicians who belong to the county society. Osteopaths have not been invited. They are not eligible to membership. The society is harmonious. Meetings are held monthly on the first Tuesday. At each meeting they have an attendance of from eight to ten. When a man has been assigned to read a paper, he rarely fails to do so. Everyone feels that it is his duty to do the work assigned him.

He has never heard of a malpractice suit in this county. In fact, he hardly knows what it means. This, he thinks, is probably due to the great efficiency of the physicians there. As to life insurance examinations, the members of the society do not make them for less than \$5.00. They have a rigid contract drawn up to that effect. He believes every physician is adhering to the contract faithfully.

The President called for reports of delegates from other counties that had not responded.

Anderson County.

DR. G. D. LILLARD said the profession in

Anderson County is in a better condition than it has ever been before. The society is in a thriving condition. Every active practitioner in the county is an active member of the county society. They have had a meeting every month this year, and the minutes have been reported to *The Journal* each time, the society having the honor of being one of the two counties which have done so. They have made the best increase in membership of any county in the State in proportion to the number of doctors in the county. They have failed in stamping out quackery and illegal practice, although with the assistance of the Secretary, Dr. Arthur T. McCormack, they presented to the grand jury the names of forty reputable citizens, who had been treated and paid for the services by these quacks and illegal practitioners. The society is powerless to do this work without the money and more active support from the State organization.

There has been but one malpractice suit in the county in the last ten years, resulting in a verdict for the defendant. It was brought for an alleged failure of reduction of a backward dislocation of both bones of the forearm. Defendant alleged that the dislocation was reduced and reproduced by the negligence of the patient. He was glad to report that all of the profession of the county are in harmony, and are dwelling together in brotherly love, something that has not existed before in this county in forty years.

Bullitt County.

DR. R. L. HACKWORTH was sorry to say that the Bullitt County Medical Society is doing no good. Peace and harmony do not prevail among the officers. It is necessary to make a change for the county society, and he thinks a change of the members of the county board of health is also necessary. The president of the society has never been present since elected. Some members have never been at any of the meetings. Some of the members are degrading the profession by cutting the price below the regular or customary fees, thereby causing bad feelings among their brother practitioners.

Caldwell-Lyon County.

DR. G. W. KINSOLVING said the standard of the profession in these two counties compared favorably with that of the other counties of the State. Most all of the doctors hold diplomas from reputable medical colleges. Some are excellent physicians, others are good, and a few are poor. On an average, however, they have a good profession, and when a patient falls into the hands of most any of these doctors, he re-

ceives proper treatment. They have not the perfect organization and co-operation with each other they should have. Many physicians do not belong to the society, and those who do belong, at least some of them, are careless about attending. The doctors do not work together for the good of the profession, but often each fellow is for himself, and sometimes they will cut fees to get practice. Envy and jealousy often permeate these societies, and when one physician is elected to office, others will not attend because they feel in their hearts that they are much better suited for the office than the one elected. Therefore, they also get so busy after that, so they cannot attend and will have nothing more to do with the society.

The society has failed to do the work it ought to have done. They have been unable to hold sessions regularly, because frequently not enough members were present to do anything. Sometimes they would fail to have a program; and, again, sometimes those who were on the program would "balk" and beg to be excused. At other times, the programs would be good and everything would move along smoothly and nicely, the meetings being grand successes, and everyone going home feeling that "it was good to be there." Sometimes failure was caused by the secretary placing men on the program to read papers who cannot or will not write them, and continuing their names from one time to another with the same results. Some physicians who are well informed and excellent practitioners cannot write good essays, and therefore will not write medical papers for the societies; but often these same doctors can talk medicine fluently and are among the ablest in the profession. He thinks it is best for a secretary to assign work to a member or members whom he knows can and will perform, and for those who cannot write papers, let them report cases and do their part orally and in conversational style.

The profession needs educating in order to work together from a business standpoint. In some vicinities a better system of fees is needed. In some places keen competition has caused doctors to cut fees down to the starvation limit. This degrades the profession and brings poverty to the doctor and his family. Again, physicians need to learn to be better collectors. It is a mistaken idea to think the laity will think more of their physicians if they will not collect their fees. He has known some physicians to practice upon that theory, "to work for glory," but they were never able to take care of their families properly and they never had the means and the equipment to practice medicine properly, and they never enjoyed the confidence of the people that their real ability deserved, and at last died in obscurity and were soon forgotten.

Physicians need to aid each other in their collections. The profession is too noble to oppress the poor, and their charity should be great, but those who are able to pay should be made to pay. A system in this part of the State was needed to take care of the dead-beat. The dead-beat is a creature that is pretty common in the counties of Caldwell and Lyon, and he needs careful attention, and the profession needs to unite upon a plan to successfully deal with his case. Merchants have a society for mutual protection on this part of their business, and he thinks the medical profession would do well to have something similar.

He has never known of but two suits for malpractice in the two counties, and they have not been decided yet. One jack-leg preacher had some trouble with his arm and called a physician to see him. He complained severely of a pain in the upper arm, about half way between the shoulder and elbow. He gave no history of any injury, and his arm could be moved freely up and down and around in a circular motion. No pain was elicited except in the arm. The physician diagnosed acute neuralgia or rheumatism and treated the case as such. The arm swelled considerably, but still no trouble was noticed at the shoulder, and the patient never complained of the shoulder. Shortly after, this man was sent to the poorhouse and remained there for some time—a month or two—and was examined by another physician, who pronounced it rheumatism. But a short time after this he managed to get into the I. C. R. R. hospital at Paducah, and while there was examined by the hospital surgeon, and Smith claimed that the surgeon said his shoulder was out of place, whereupon Smith sued his family physician for five thousand dollars for alleged malpractice, and on top of this because the hospital surgeons failed to give relief that he claimed they ought to have given him, he, in our last court, brought suit for five thousand dollars, for alleged malpractice against the I. C. R. R., and it is reported that if he has any success in these two suits, he will then bring suit against the doctor who examined him while at the poor house. These cases have not come up in court yet.

He thinks the profession needs better legal protection against these irresponsible dead-beats who are always ready to harrass and persecute and blackmail a reputable doctor, without the least provocation. If they gain nothing by the suit, they have nothing to lose, but the doctor has his attorney to pay, besides other expenses, humiliation and annoyance. Physicians need a law to compel such dead-beats to give bond for the cost of the suit, and thereby place the suit upon a high plane of honor and justice and of equal rights to both parties concerned. This

ought to be referred to the Committee on Legislation.

THE PRESIDENT: That ends the report of delegates from the various counties. These reports are now before the house to be considered by formal motion as a whole. What is the wish of the house?

THE SECRETARY: I move that these reports be referred to the Council for publication in The Journal.

Seconded and carried.

The Secretary then announced the appointment of the following committees by the President for the session:

Committees of the House of Delegates.

1. Committee on Reports of Councilors.—H. C. Clark, Pendleton, Chairman; T. J. Howes, Shelby, and J. S. Loek, Knox.

2. Committee on The Journal.—Frank Boyd, McCracken, Chairman; Hugh D. Rodman, Nelson, and S. J. Harris, Daviess.

3. Committee on County Societies.—J. E. Wells, Chairman; W. W. Richmond, J. H. Blackburn, J. T. Wesley, and D. C. Bowen.

4. Committee on Reports of Officers, other than Councilors. — William Bailey, Jefferson, Chairman; T. R. Welch, Jessamine, and J. T. Smith, Monroe.

5. Committee on Medical Defense Fund for Malpractice Suits.—R. C. McChord, Chairman; N. L. Rogers, Ballard; Charles Gower, Todd; S. F. Richardson, Hart; W. O. Roberts, Jefferson; Charles B. Kobert, Marion; J. M. Aetion, Garrard; J. F. Peck, Scott; J. W. Strother, Carter; W. O. Bullock, Fayette; T. H. Curd, Bell; George J. Hermann, Campbell-Kenton, and Alexander Seaggs, Rowan.

6. Committee on Legislation and Public Policy.—C. Z. Aud, Chairman; D. G. Simmons, Logan, and J. T. Windell, Jefferson.

7. Committee on Life Insurance Fees.—J. L. Atkinson, Campbellsville, Chairman; D. B. Stone, Warren, and Z. A. Thomas, Pikeville.

8. Committee on Pharmacology. — C. H. Vaught, Madison, Chairman; J. M. Beeler, Hickman, and C. D. Mansfield, Powell.

9.—Committee on Reciprocity in Medical Licensure.—J. N. McCormack, Chairman; I. S. Manning, Clay, and Ben P. Earle, Hopkins.

10. Committee on Finance.—J. W. Crenshaw, Woodford, Chairman; E. J. Brown, Lincoln; C. Thompson, Jefferson, and R. T. Hocker, Carlisle.

11. Committee on Contract Practice.—J. R. Cowan, Boyle, Chairman; G. W. Moore, Boyd; J. M. Rees; J. L. Pythian, Campbell-Kenton, and J. W. Scott.

12. Committee on Amendments to Constitution and By-Laws.—J. W. Ellis, Chairman; J. G. Sherrill, I. A. Shirley, J. W. Kincaid, and D. C. Bowen.

13. Committee on State Fee Bill.—D. S. Wilson, Jefferson, Chairman; Arch Dixon, Henderson; Finis London, Simpson; J. M. Reddish, Pulaski, and T. Q. Meredith, Mercer.

14. Committee on Principles of Ethics.—J. J. Moren, Jefferson, Chairman; F. D. Cartwright, Warren; F. H. Clark, Fayette; G. S. Brock, Laurel, and S. E. Spratt, Montgomery.

15. Committee on Resolutions.—H. K. Orsburn, Daviess, Chairman; A. B. Nickell, Morgan, and J. H. Heavrin, Hancock.

16. Committee on Public Health and Sanitation.—U. L. Taylor, Adair, Chairman; C. W. Holland, Allen; C. H. Wallin, Bracken.

17. Committee on Medical Education.—F. D. Cartwright, Warren, Chairman; Wm. Bailey, Jefferson; Michael Casper, F. H. Clark, Fayette; J. L. Cox, Wolfe.

18. Committee on the Election of Guests.—H. E. Tuley, Jefferson, Chairman; J. F. Kirksey, Graves, and A. V. Meniffee, Grant.

19. Committee on Credentials.—W. W. Richmond, Chairman; Horace Lutten, Fulton, and C. M. Anderson, Owsley.

New Business.

THE SECRETARY: Under the head of New Business, I would ask unanimous consent that

the motions and resolutions considered by the Council this afternoon be considered as introduced and referred to the appropriate committees which have been announced for report back to the House of Delegates. These resolutions are lengthy; they have been considered by the Council, and are mere recommendations for the committees to base their action on, and as final action will be on the reports of the committees, it will facilitate our business by thus disposing of these various motions and resolutions. There are a dozen or more of them.

There being no objection, it was so ordered, and the reports were referred to the various committees.

It was moved and seconded that the reports of the Secretary and Business Manager be referred to the Finance Committee. Carried.

DR. HENRY E. TULEY: I move that Chapter V of the Constitution be referred to the Committee on Amendments to the Constitution and By-Laws, with instructions to report back in time for the final action of the House of Delegates.

Seconded and carried.

THE SECRETARY: I move that the Councilors' reports and the reports of the various committees involving expenditures be referred to the Committee on Finance.

Seconded and carried.

On motion, the House of Delegates then adjourned until 8 A. M., Tuesday.

COUNCIL OF PHARMACY.

KASAGRA.

A fluidextract said to conform in drug strength to the requirements of the U. S. Pharmacopeia for fluidextracts. It is prepared with especial care, the drug being extracted with a menstruum containing no alcohol. The preparation is said to contain 0.05 per cent. of alcohol.

Actions and Uses.—Kasagra is recommended as an especially palatable preparation of cascara, owing its laxative effects to this drug alone. Dosage.—1 to 2 Cc. (15 to 30 minims) four times a day, half an hour before meals and at bedtime. Prepared by F. Stearns & Co., Detroit, Mich.

KOLA, STEARNS.

Each 30 Cc. (1 fluidounce) is said to represent 31 Gm. (480 grains) of fresh kola nut. It contains 23.5 per cent. of alcohol.

Actions and uses.—Kola seeds contain from 1.5 to 3.6 per cent. of total alkaloids, of which

from 1-1000 to 1-40 is theobromine and the rest is caffeine. About one-half of the caffeine is combined as kolatannate of caffeine. The actions and uses of the remedy are essentially the same as those of caffeine. It is probable that the kola-tannate is not so active as free caffeine. Dosage.—2 to 4 Cc. (1-2 to 1 fluidram) three times a day. Prepared by Frederick Stearns & Co., Detroit, Mich.

KRESAMINE.

A clear watery solution of 25 per cent. of trikresol (which see) and 25 per cent. of ethylene-diamine.

Actions and Uses.—Kresamine is a powerful bactericide, with a claimed minimum of toxicity. It is said that the bactericidal effect of the cresol and its power of penetrating the animal tissues are greatly enhanced by the presence of ethylenediamine and it is claimed to be far less irritating when used as a wet dressing than other antiseptics. It is useful in all cases where an active bactericide is required and particularly when the microbes are in an albuminous menstruum. The prep-

aration is not so dangerous as carbolic acid. It has been recommended for the treatment of ulcers, eczema, lupus and other skin affections. Dosage.—It is used only in dilutions (2 to 25) containing 2 per cent. or less of each of its active constituents. Kresamine may be applied in the form of ointment. A dilution containing 2 per cent. of each ingredient was formerly marketed under the name of "Ethylene-diamine Trikresol Solution." This was used without dilution. Prepared by Chemische Fabrik auf Actien, vorm. E. Schering, Berlin (Schering & Glatz, New York).

LAC BISMO.

A mixture said to consist of bismuth hydroxide and bismuth subcarbonate, suspended in water, in a finely divided state, and containing 0.16 Gm. (2 1-2 grains) of the salts in 4 Cc. (1 fluidram).

Dosage.—4 to 16 Cc. (1 to 4 fluidrams) as directed. Prepared by E. J. Hart & Co., Ltd., New Orleans, La.

LACTOPHENIN.

Lactophenin, $C_6H_4(OC_2H_5)(NH.CH_3.CHOH.CO) = C_{11}H_{15}NO_3$, is a compound differing from acetphenetidin (phenacetin) in that the acetic acid group is replaced by the lactic acid group, $(CH_3.CHOH.CO)$.

Actions and Uses.—The effects of lactophenin are similar to those of acetphenetidin (phenacetin), over which it possesses the advantage of greater solubility in water. Dosage.—0.5 to 1 Gm. (8 to 15 grains), in wafers or capsules. Manufactured by Chem. Fabrik, vorm. Goldenberg, Geromont & Co.

LEMINOIDS FERRUGINOUS (NASCENT).

Each tablet contains iron sulphate and sodium bicarbonate in quantities equivalent to those of pilulæ ferri carbonatis (Blaud's pills), but the two salts are separated into two layers so that the formation of ferrous carbonate will occur only when the tablets are moistened. An excess of bicarbonate is present to neutralize the acid in the stomach.

Dosage.—The same as Blaud's pills. Prepared by Schieffelin & Co., New York.

LENNIGALLOL.

Lennigallol, $C_6H_3(CH_3CO_2)_3 = C_{12}H_{12}O_6$, is triacetyl-pyrogallol obtained by replacing the hydroxyl groups of pyrogallol with acetyl groups.

Actions and Uses.—Lennigallol is said to be non-poisonous and non-irritating, but a

mild and painless corrosive. It is introduced as a substitute for pyrogallol in psoriasis, lupus, acute and subacute eczema of children and other skin diseases. Dosage.—In 5 to 10 per cent. ointment with zinc oxide. Manufactured by Knoll & Co., Ludwigshafen a. R.

LIQUOR TRITICI.

A solution of which each Cc. (15 minims) is said to represent 1.75 Gm. (27 grains) of triticum repens in a menstruum containing 23.5 per cent. of alcohol.

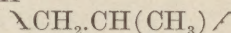
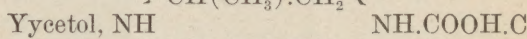
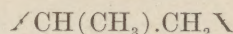
Dosage.—4 Cc. to 16 Cc. (1 to 4 fluidrams) at intervals of from two to four hours. Prepared by Parke, Davis & Co., Detroit, Mich.

LITHIUM ICHTHYOL.

A lithium derivative of ichthyol. It is a dark brown mass, somewhat more consistent, but otherwise resembling ammonium ichthyol in appearance.

Actions and Uses.—It is an antiseptic and bactericide. It is recommended as a wound antiseptic and in syphilis. Manufactured by the Ichthyol Co., Hamburg, (Merk & Co., New York).

LYCETOL.



$HOH.CHOH.COOH = C_{10}H_{20}O_6N_2$, is a tartrate of a methyl derivative of diethylenediamine (piperazine).

Actions and Uses.—Lycetol is claimed to be a serviceable diuretic and uric acid solvent. It is said to be free from disturbing effects on the stomach and to be well tolerated for long periods. Dosage.—1 to 2 Gm. (15 to 30 grains), well diluted, and preferably in carbonated water, sweetened with sugar if desired. Manufactured by Farbenfabriken, vorm. Bayer & Co., Elberfeld, Germany (Continental Color & Chemical Co., New York).

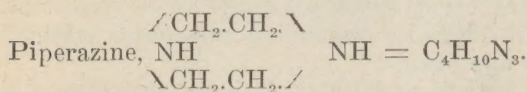
PEGNIN.

The milk-curdling enzyme of calf's rennet, diluted with sugar of milk and sodium chloride.

Actions and Uses.—Producing a finely divided coagulum, it obviates the formation of the clotty curds which are liable to be produced when untreated cow's milk is taken as food. Cow's milk coagulated with pegin as described below is said to be particularly serviceable for infant feeding and well adapted as a food for adults in stomach affections and in disturbances of the digestion incident to infectious diseases, in hyperacidity, etc. Dosage.

—8 to 10 Gm. (120 to 150 grains) of peginin are required for one liter (34 fluidounces) of milk, previously boiled and cooled to about 40° C. (104° F.). The mixture, after a brief shaking is allowed to stand 2 to 3 minutes or until it is completely coagulated, and then shaken vigorously during several minutes until the coagulum has been converted into a smooth, homogeneous mixture, and set aside in a cool place. It is transferred to the nursing bottle as required and heated in warm water to the body temperature (37.5° C., 99.5° F.) before feeding infants. Manufactured by Farbwerke, vorm. Meister, Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

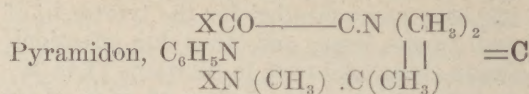
PIPERAZINE.



is a synthetic base obtained by the condensation of the two $\text{CH}_2.\text{CH}_2.$ groups, with two NH groups.

Actions and Uses.—A part of the piperazine ingested passes undecomposed into the urine and is claimed by some to form a very soluble compound with the primary uric acid; others state that the piperazine which is excreted is largely in combination with the stronger mineral acids. It has been shown that urine containing piperazine has no greater solvent power on uric acid than ordinary urine. It seems to produce no symptoms in man or animals, even when administered in fairly large quantities, although it is stated that, after large doses, tremors, clonic spasms, and general depression have occurred. Piperazine has been recommended for the prevention of the formation of renal and vesical calculi and for the relief of irritation of the bladder due to excess of uric acid in the urine and in cases of chronic gout, rheumatism, renal colic, etc. The attempt to secure the solution of uric acid in the body by this as well as other remedies has not been successful in the experience of many clinicians. **Dosage.**—0.3 to 0.6 Gm. (5 to 10 grains), daily dose, 1 to 2 Gm. (15 to 30 grains). Owing to its hygroscopic character, it is impracticable to dispense it in powder; it should, therefore, be dispensed in solution in water, plain or carbonated, but in quantities sufficient for a day's supply only. Manufactured by Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany Continental Color and Chemical Co., New York). Also by Chemische Fabrik auf Actien vorm. E. Schering, Berlin (Schering & Glatz, New York).

PYRAMIDON.



$\text{C}_{13}\text{H}_{17}\text{N}_3\text{O}$, is phenyl-dimethyl-dimethylamido pyrazolon, substitution product of antipyrine, $\text{C}_{11}\text{H}_{12}\text{N}_3\text{O}$, into the molecule of which a dimethylamino group, $\text{N}(\text{CH}_3)_2$, has been introduced.

Actions and Uses.—Pyramidon acts as an antipyretic and anodyne, like antipyrine, but is effective in much smaller doses. The action, while somewhat slower at the beginning, is more lasting. It is claimed to be devoid of harmful influence on the blood, heart or kidneys; to the contrary it is said to stimulate the heart's action. It has been recommended particularly in the chronic fevers of tuberculosis, as well as in the acute febrile conditions incident to typhoid fever, erysipelas and pneumonia. **Dosage.**—0.3 to 0.4 Gm. (5 to 6 grains), most conveniently in the form of tablets, a single dose usually sufficing for 24 hours. Manufactured by Farbwerke, vorm. Meister, Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).

PYRAMIDON NEUTRAL CAMPHORATE.

This compound, $(\text{C}_{13}\text{H}_{12}\text{N}_3\text{O})_2 \cdot \text{C}_{10}\text{H}_{16}\text{O}_4$, is a neutral salt of pyramidon and camphoric acid.

Actions and Uses.—See pyramidon acid camphorate. Manufactured by Farbwerke, vorm. Meister, Lucius & Bruening, Hoechst, a. M. (Victor Koechl & Co., New York).

PYRAMIDON ACID CAMPHORATE.

This is an acid salt of pyramidon and camphoric acid, $\text{C}_{13}\text{H}_{17}\text{N}_3\text{O} \cdot \text{C}_{10}\text{H}_{16}\text{O}_4$.

Actions and Uses.—The acid and neutral salts combine the antipyretic action of pyramidon with the antihydrotic action of camphoric acid. It is claimed that in these compounds the respective action of the component is modified, the anti-hydrotic effect of the camphoric acid being materially increased, while the toxicity of the pyramidon is diminished. In the neutral salt, the antipyretic action of the pyramidon predominates; in the acid salt the antihydrotic effect of the camphoric acid. They are particularly recommended in the febrile conditions of phthisis, attended by profuse sweating. **Dosage.**—Neutral camphorate, 0.5 to 0.75 Gm. (3 to 12 grains); acid camphorate, 0.75 to 1 Gm. (12 to 15 grains), given in powders or aqueous solution. Manufactured by Farbwerke, vorm. Meister, Lucius & Bruening, Hoechst a. M. (Victor Koechl & Co., New York).